MARK V-100 XCEL

CONVECTION OVEN

INSTALLATION - OPERATION - MAINTENANCE

(Formerly MARK V XCEL)

BLODGETT OVEN COMPANY

www.blodgett.com

44 Lakeside Avenue, Burlington, Vermont 05401 USA Telephone: (802) 658-6600 Fax: (802)864-0183

PN 36433 Rev Q (3/14)

© 2014 - G.S. Blodgett Corporation

Your Service Agency's Address:

Model

Serial number

Oven installed by

Installation checked by

IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the instllation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

The information contained in this manual is important for the proper installation, use, and maintenance of this oven. Adherence to these procedures and instructions will result in satisfactory baking results and long, trouble free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

TABLE OF CONTENTS

INSTALLATION

Oven Description and Specifications 2
Delivery and Location 3
Oven Assembly 4
- Sanitation Bolts 4
- Leg Attachment 5
- Caster Assembly 5
- Double Section Assembly 6
- Oven Leveling 6

Utility Connections - Standards and Codes 7
Electrical Connection 8
Initial Startup 9

OPERATION

Safety Information. 10
Solid State Manual Control. 11
Solid State Digital Control. 12
CH-Pro3 (Solid State Programmable Digital Control) 17
Blodgett IQ2™ Vision Control 20
SmartTouch Touchscreen Control. 30
How Cook & Hold Works. 43
General Guidelines for Operating Personnel 44

Suggested Times and Temperatures 45

MAINTENANCE

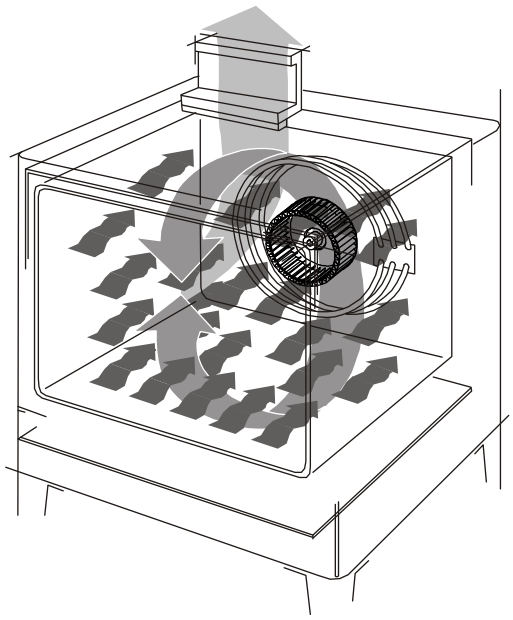
Cleaning and Preventative Maintenance 46
Troubleshooting Guide 47

Installation

Oven Description and Specifications

Cooking in a convection oven differs from cooking in a conventional deck or range oven since heated air is constantly recirculated over the product by a fan in an enclosed chamber. The moving air continually strips away the layer of cool air surrounding the product, quickly allowing the heat to penetrate. The result is a high quality product, cooked at a lower temperature in a shorter amount of time.

Blodgett convection ovens represent the latest advancement in energy efficiency, reliability, and ease of operation. Heat normally lost, is recirculated within the cooking chamber before being vented from the oven: resulting in substantial reductions in energy consumption and enhanced oven performance.



Air Flow Pattern for Mark V-100 XCEL

Figure 1

ELECTRICAL RATINGS- MKV1XL/AA								
VOLTAGE	HZ	KW	PHASE	MAX LOAD (AMPS				MOTOR
				L1	L2	L3	N	
U.S. and Canadian installations								
208	60	11.0	1	53	—	53	—	6 AWG
208	60	11.0	3	33	28	33	—	8 AWG
220-240	60	11.0	1	50	—	50	—	6 AWG
220-240	60	11.0	3	28	23	28	—	8 AWG
440	60	11.0	3	16	13	16	—	12 AWG
480	60	11.0	3	15	12	15	—	12 AWG
General Export installations								
220-240	50	11.0	1	50	—	50	—	Size per local code
220/380	50	11.0	3	17	15	15	4	Size per local code
240/415	50	11.0	3	19	14	14	5	Size per local code
230/400	50	11.0	3	19	14	14	5	Size per local code

Delivery and Location

DELIVERY AND INSPECTION

All Blodgett ovens are shipped in containers to prevent damage. Upon delivery of your new oven:

- Inspect the shipping container for external damage. Any evidence of damage should be noted on the delivery receipt which must be signed by the driver.
- Uncrate the oven and check for internal damage. Carriers will accept claims for concealed damage if notified within fifteen days of delivery and the shipping container is retained for inspection.

The Blodgett Oven Company cannot assume responsibility for loss or damage suffered in transit. The carrier assumed full responsibility for delivery in good order when the shipment was accepted. We are, however, prepared to assist you if filing a claim is necessary.

OVEN LOCATION

The well planned and proper placement of your oven will result in long term operator convenience and satisfactory performance.

The following clearances must be maintained between the oven and any combustible or non-combustible construction.

- Oven body right side - 0” (0 cm)
- Oven body left side - 0” (0 cm)
- Oven body back - 0” (0 cm)
- Oven body bottom - 1/2” (1.2 cm)

The following clearances must be available for servicing.

- Oven body sides - 12” (30 cm)
- Oven body back - 12” (30 cm)

It is essential that an adequate air supply to the oven be maintained to provide a sufficient flow of combustion and ventilation air.

- Place the oven in an area that is free of drafts.
- Keep the oven area free and clear of all combustibles such as paper, cardboard, and flammable liquids and solvents.
- Do not place the oven on a curb base or seal to a wall. This will restrict the flow of air and prevent proper ventilation. Tripping of the blower motor’s thermal overload device is caused by an excessive ambient temperature on the right side of the oven. This condition must be corrected to prevent permanent damage to the oven.

Before making any utility connections to this oven, check the rating plate to be sure the oven specifications are compatible with the electrical services supplied for the oven.

1. Pull out control panel. The rating plate attached to the inside of the control compartment.

Installation

Oven Assembly

SANITATION BOLTS

These bolts are required by NSF to block any exposed hole on the back of an oven. This includes:

- any unit, single or stacked, without a back panel.
- any holes in stacked units not used for mounting stacking brackets.

1. Locate the 5/16” bolts that were shipped with the oven.
2. Install the bolts as shown.

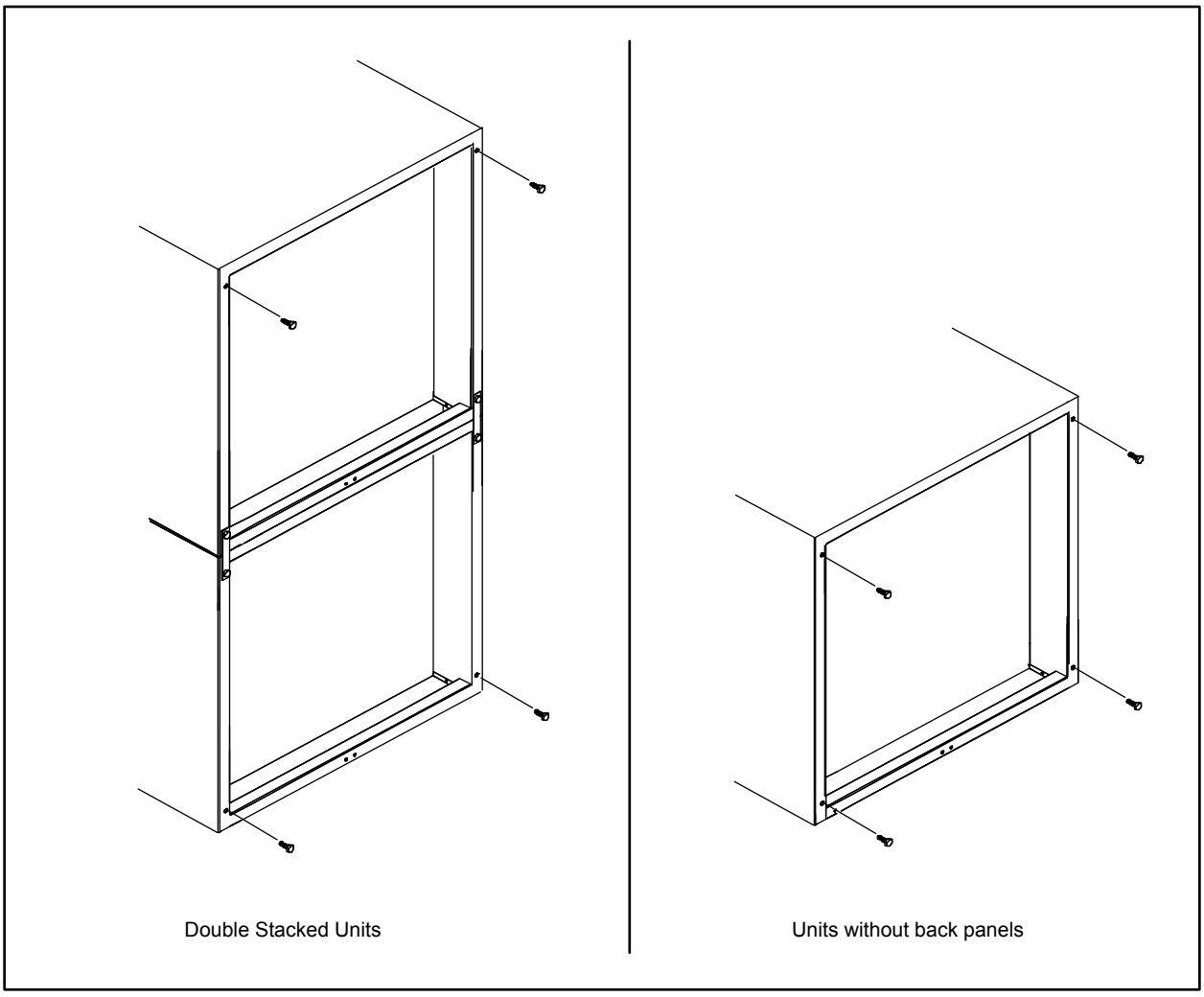


Figure 2

Oven Assembly

LEG ATTACHMENT

1. Lay the oven on its back.
2. Align the threaded stud in each leg with the nut located inside each bottom corner of the oven frame. Turn the legs clockwise and tighten to the nearest full turn.
3. Align the two leg plate holes in each leg with those in the oven bottom. Secure each leg using two 1/2" bolts.

   NOTE: If using casters see CASTER ASSEMBLY before proceeding.
4. Level the oven by screwing the adjustable leg feet in or out as necessary.

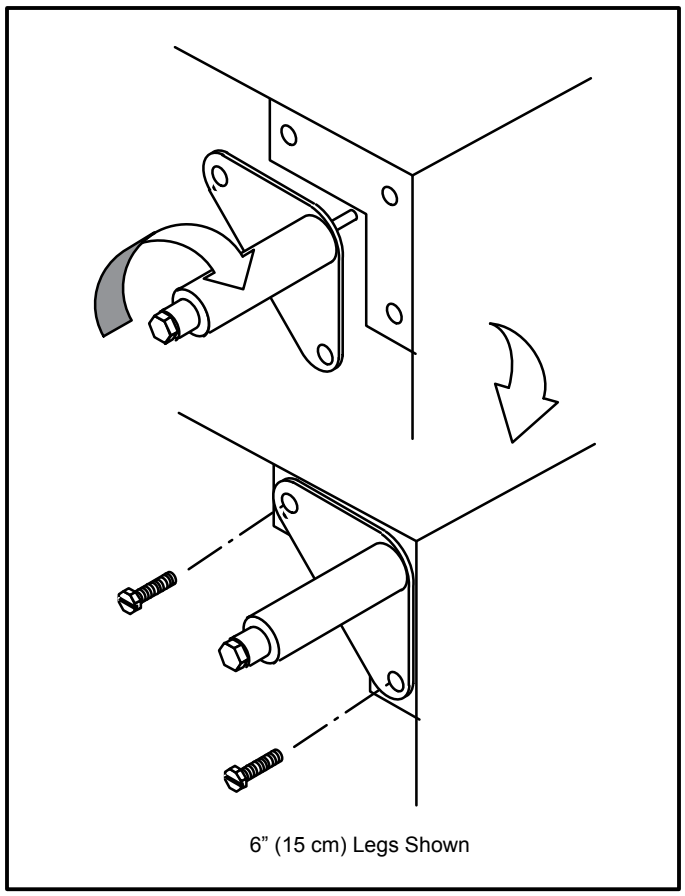


Figure 3

CASTER ASSEMBLY

NOTE: Install the locking casters on the front of the oven. Install the non-locking casters on the back of the oven.

Casters for Single and Double Stacked Ovens:

1. Attach the legs as described.
2. Pry the adjustable feet out of the legs
3. Insert one caster into each leg as shown. Tighten the lock nuts to secure the casters.

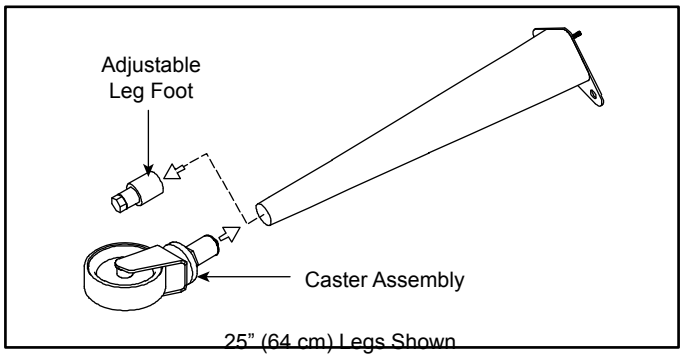


Figure 4

Low Profile Casters for Double Stacked Ovens:

1. Align the three holes in each caster assembly plate with those in the oven bottom. Secure each caster using three 1/2" bolts.

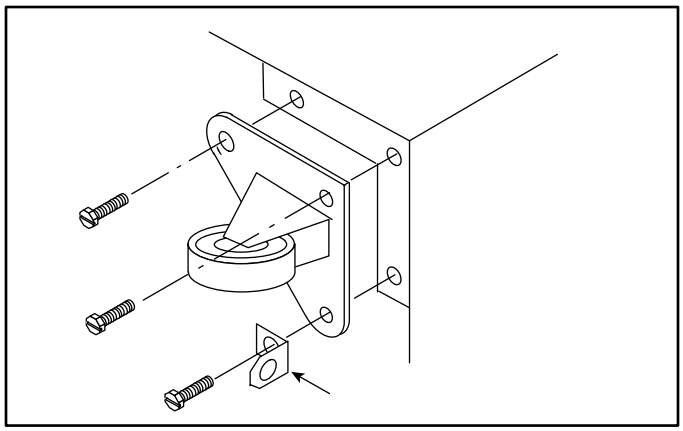


Figure 5

Installation

Oven Assembly

DOUBLE SECTION ASSEMBLY

1. Secure the short legs to the bottom sections as described.
2. Attach lower flue box to lower oven.
3. Place the upper section in position on top of the lower oven.
4. Attach the stacking brackets using the remaining 5/16” bolts shipped with the ovens.
5. Install flue riser and attach upper flue box to upper oven.

WARNING!!

When stacking ovens be sure to remove the single oven flue boxes prior to attaching upper and lower boxes and riser.

OVEN LEVELING

After assembly, the oven should be leveled and moved to the operating location.

1. The oven can be leveled by adjusting the feet or casters located on the bottom of each leg.

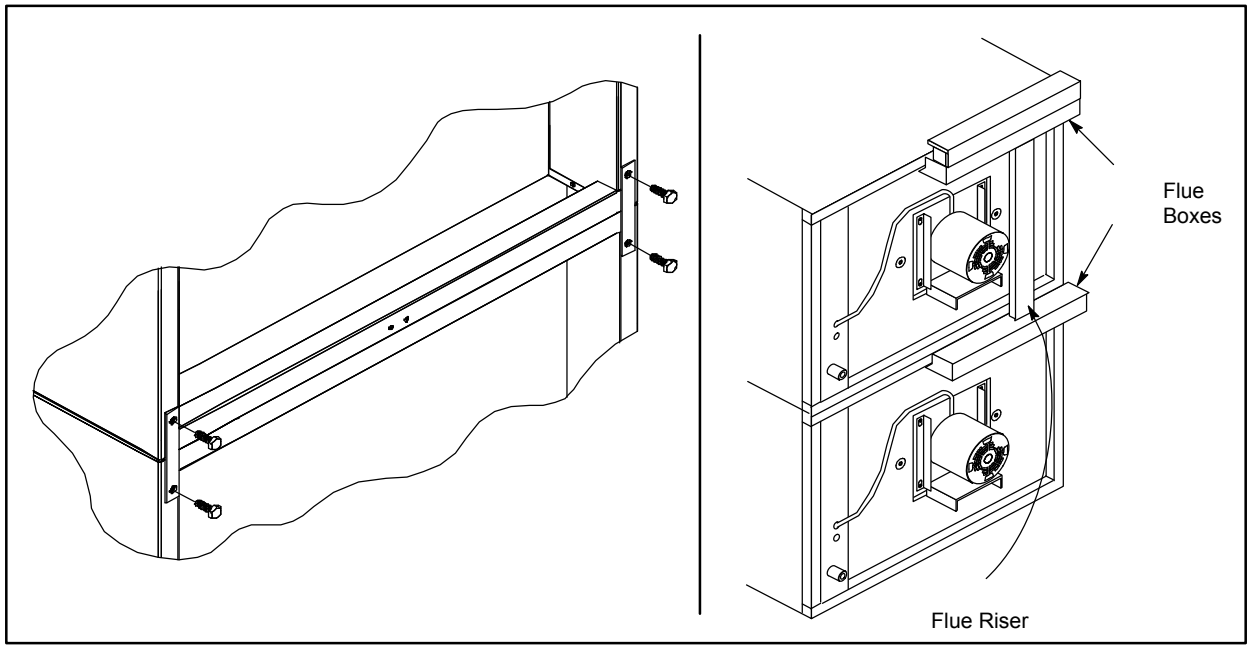


Figure 6

Utility Connections - Standards and Codes

THE INSTALLATION INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE OVEN AND/OR INJURY TO THE OPERATOR.

Qualified installation personnel are individuals, a firm, a corporation, or a company which either in person or through a representative are engaged in, and responsible for:

- the installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance.

Qualified installation personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.

U.S. and Canadian installations

All ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-Latest Edition and/or Canadian National Electric Code C22.2 as applicable.

The ventilation of this oven should be in accordance with local codes. In the absence of local codes, refer to the National ventilation code titled, “Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment”, NFPA-96-Latest Edition.

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

General export installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your Blodgett oven, please contact your local distributor. If you do not have a local distributor, please call the Blodgett Oven Company at 0011-802-658-6600.

Installation

Electrical Connection

Wiring diagrams are located in the control compartment and on the back of the oven.

The electric motor, indicator lights and related switches are connected to the oven as follows:

1. Remove the bottom trim and control panel covers. Slide the control panel forward.
2. Connect the supply conduit to the wire duct located in the lower left hand corner on the back of the oven.
3. Run the supply wires through the duct to the front of the oven.
4. Connect the supply wires to top of right contactor in the control compartment at the lower right corner of the oven.
5. Reinstall the bottom trim and control panel covers.

NOTE: To prevent damage there is no power to the heating elements when the blower is not operating.

THE BLODGETT OVEN COMPANY CANNOT ASSUME RESPONSIBILITY FOR LOSS OR DAMAGE SUFFERED AS A RESULT OF IMPROPER INSTALLATION.

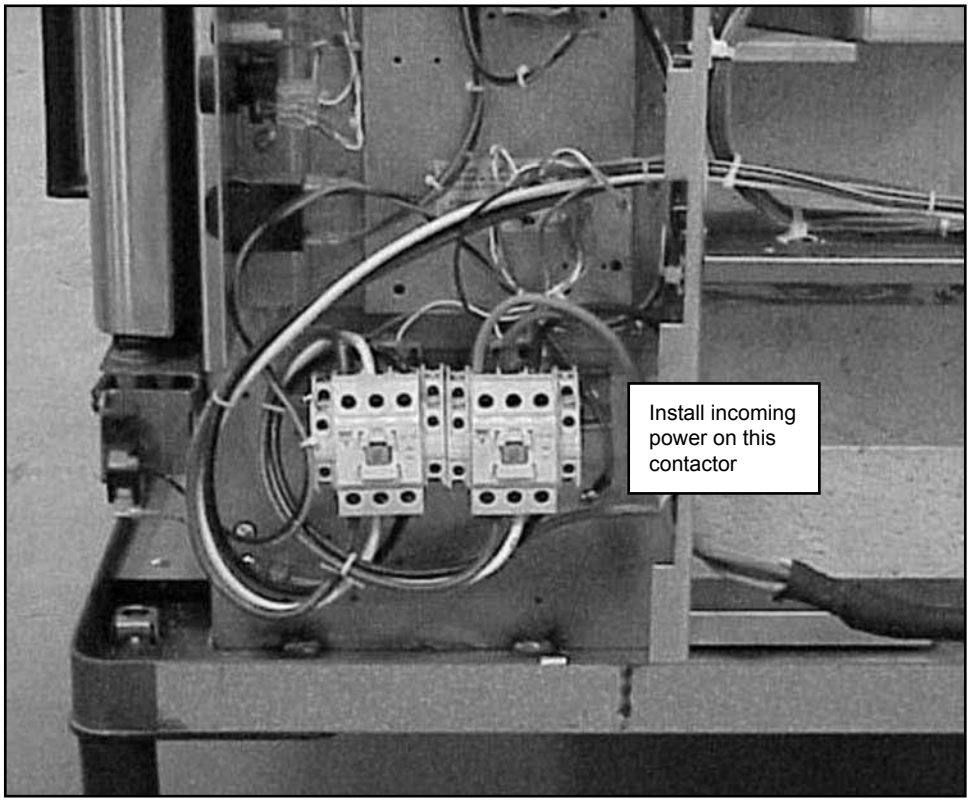


Figure 7

OVEN RESTRAINT

If casters are used in conjunction with a power supply cord for movable appliances, a fixed restraint should be provided.

The restraint (ie: heavy gauge cable) should be attached without damaging the building. DO NOT use the gas piping or electrical conduit for the attachment of the permanent end of the restraint! Use anchor bolts in concrete or cement block. On wooden walls, drive hi test wood lag screws into the studs of the wall.

If the oven is moved from its regular location, the restraint must be reconnected when the oven is returned.

1. Mount the supplied bracket to the leg bolt just below the power cord.
2. Attach the clip on restraining cable to the mounting bracket.

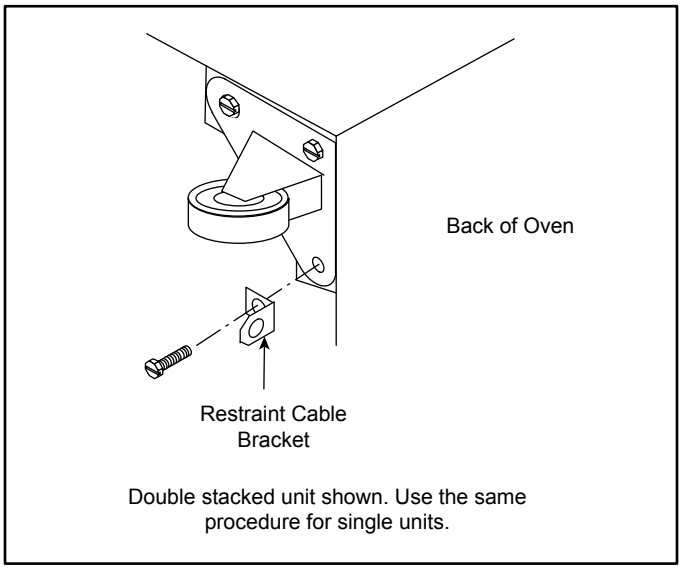


Figure 8

ADJUSTMENTS ASSOCIATED WITH INITIAL INSTALLATION

Each oven, and its component parts, have been thoroughly tested and inspected prior to shipment. However, it is often necessary to further test or adjust the oven as part of a normal and proper installation. These adjustments are the responsibility of the installer, or dealer. Since these adjustments are not considered defects in material or workmanship, they are not covered by the Original Equipment Warranty. They include, but are not limited to:

- calibration of the thermostat
- adjustment of the doors
- leveling
- tightening of fasteners.

No installation should be considered complete without proper inspection, and if necessary, adjustment by qualified installation or service personnel.

Operation

Safety Information

The information contained in this section is provided for the use of qualified operating personnel. Qualified operating personnel are those who have carefully read the information contained in this manual, are familiar with the functions of the oven and/or have had previous experience with the operation of the equipment described. Adherence to the procedures recommended herein will assure the achievement of optimum performance and long, trouble-free service.

Please take the time to read the following safety and operating instructions. They are the key to the successful operation of your Blodgett oven.

SAFETY TIPS

For your safety read before operating

General safety tips:

- If the oven needs to be moved for any reason, the supply cord must be disconnected from the unit before removing the restraint cable. Reconnect the restraint after the oven has been returned to its original location.
- DO NOT remove the control panel cover unless the oven is unplugged.

Solid State Manual Control

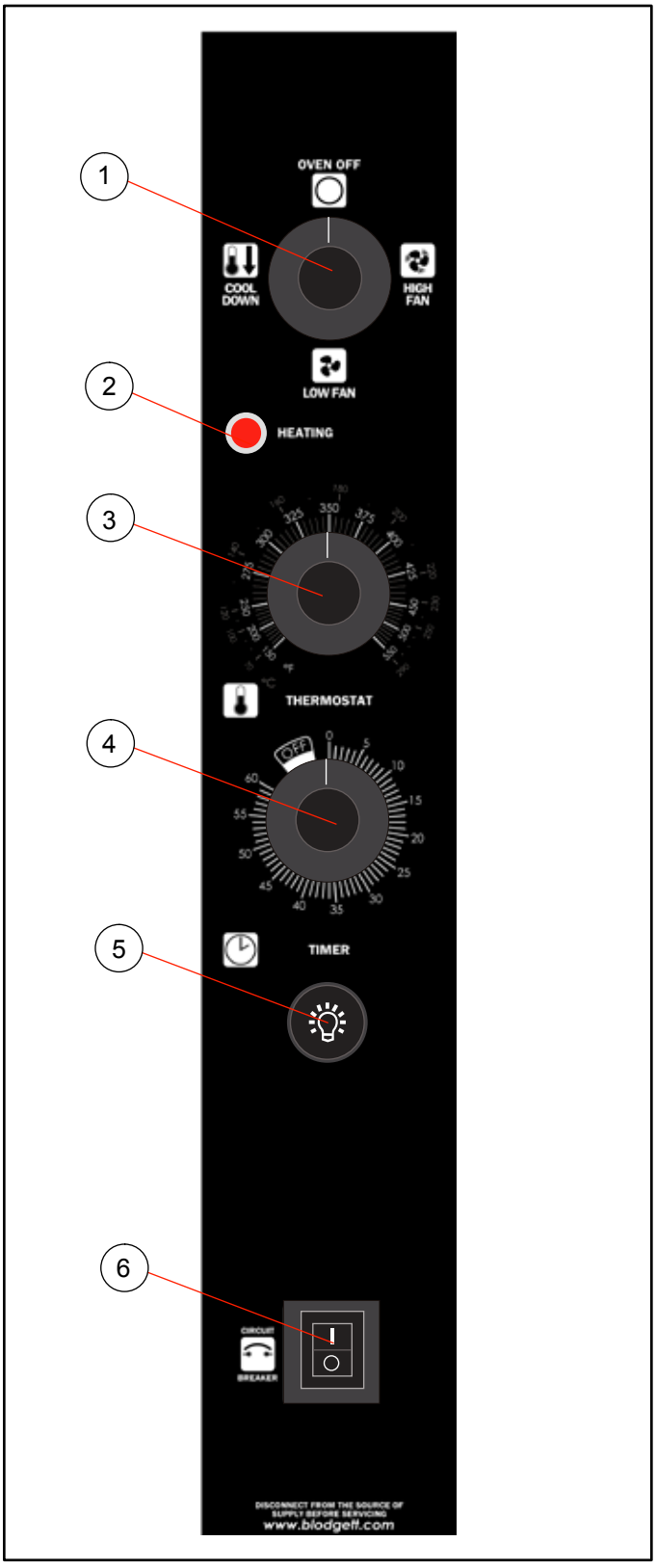


Figure 9

CONTROL DESCRIPTION

1. SELECTOR SWITCH - controls power to the oven for high fan, low fan or cool down.
2. OVEN READY LIGHT - when lit indicates elements are heating. When the light goes out the oven has reached operating temperature.
3. SOLID STATE THERMOSTAT - allows an infinite selection of temperatures from 150-550°F (66-288°C). (infinite control shown)
4. TIMER - activates an electric buzzer that sounds when the cook time expires.
5. LIGHTS SWITCH - controls interior lights.
6. CIRCUIT BREAKER SWITCH - controls power to the oven.

OPERATION

1. Turn the SELECTOR Switch (1) to either HIGH FAN or LOW FAN. The blower and control compartment cooling fan operate and are controlled automatically by the action of the doors.
2. Set the SOLID STATE THERMOSTAT (3) to the desired setting or temperature.
3. Preheat until the OVEN READY LIGHT (2) goes out.
4. Load product into the oven. Determine cook time and set the TIMER (4).
5. When the buzzer sounds, remove the product from the oven. Turn the TIMER knob (4) to OFF to silence the buzzer.
6. Turn the SELECTOR Switch (1) to OVEN OFF.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

Operation

Solid State Digital Control

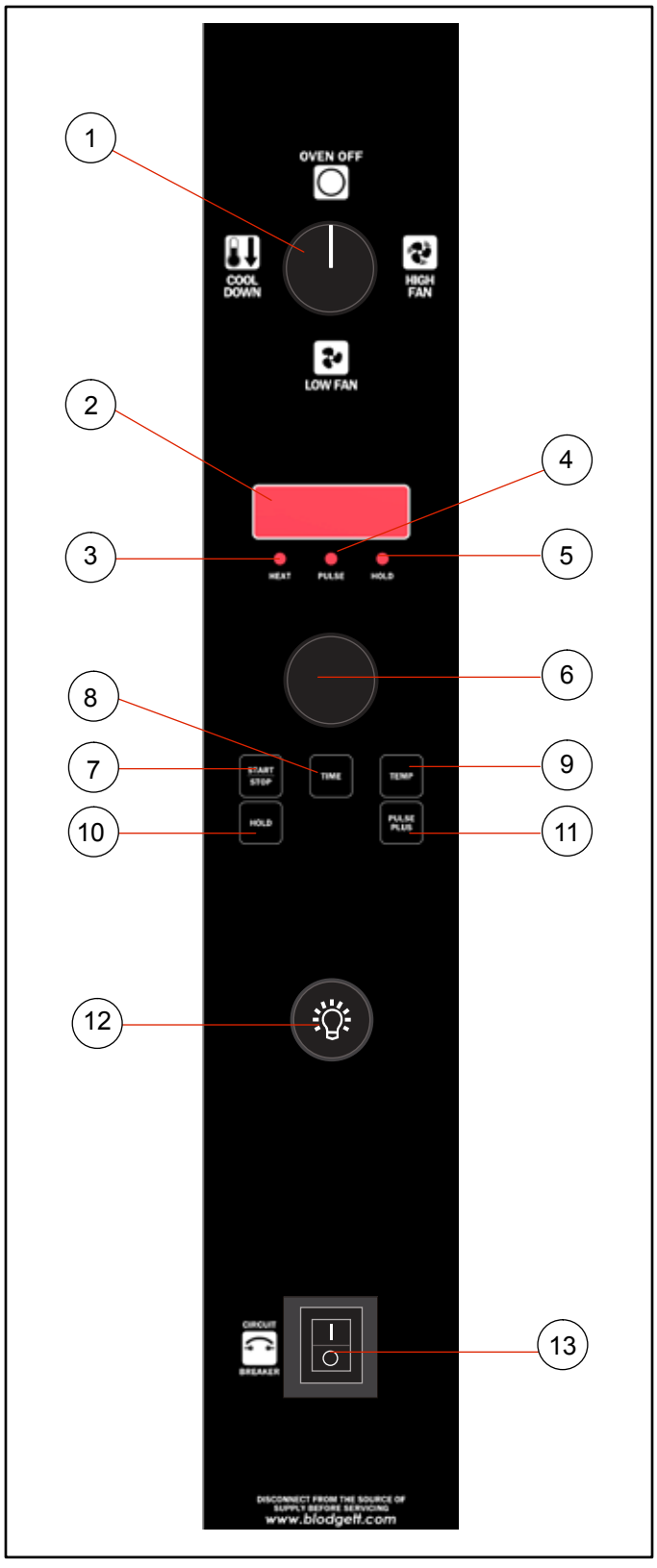


Figure 10

CONTROL DESCRIPTION

1. SELECTOR SWITCH - turns power to the oven on or off. Allows selection of Cook or Cool Down Modes and fan speed (if applicable).
2. DISPLAY - displays time or temperature and other information related to oven function.
3. HEAT LAMP - lights when heater is on.
4. PULSE LAMP - lights when Pulsed Fan Mode is turned on.
5. HOLD LAMP - lights when Hold Mode is turned on.
6. DIAL - used to enter set points in display
7. START/STOP KEY - starts or stops the timer.
8. TIME KEY - used to show time in the display.
9. TEMP KEY - used to show set temperature in the display.

   NOTE: Actual temperature is shown while the TEMP key is held down.
10. HOLD KEY - turns Hold Mode on or off.
11. PULSE KEY - turns Pulse Mode on or off.
12. LIGHTS SWITCH - controls interior lights.
13. CIRCUIT BREAKER SWITCH - controls power to the oven.

PROGRAMMING

To set the cook temperature:

1. Press TEMP (9) key.
2. Rotate dial (6) to enter temperature.

To set the cook time:

1. Press TIME (8) key.
2. Rotate the dial (6) to enter time.

   NOTE: Time is entered in hours:minutes (0:00) or minutes:seconds (00:00).

To set the hold time:

1. Press HOLD key (10) to turn hold mode on.

   NOTE: HOLD light is on.
2. Rotate dial (6) to enter the hold temperature.
3. Press START/STOP key (7)

To set the pulse time:

1. Press PULSE KEY (11) to turn pulse mode on.

   NOTE: Pulse light is on.

2. Rotate DIAL (6) to enter the pulse time. Pulse time is a portion of the pre-set cook time.

OPERATION

Cook Only:

1. Turn SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Load product into oven.

   NOTE: The display reads LOAD with the oven is near the set temperature.

4. Press the START/STOP key (7). The timer begins to count down.
5. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
6. Press the START/STOP key (7) to silence the buzzer.
7. Remove the product.

Cook with Hold:

NOTE: HOLD light is on when hold mode is on and off when hold mode is off.

1. Turn SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Press the HOLD key (10). Enter the hold temperature.
4. Load product into oven.

   NOTE: The display reads LOAD with the oven is near the set temperature.

5. Push the START/STOP (7) key. Timer begins to count down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE. The buzzer turns off after a few seconds. The display reads HOLD until the oven reaches the hold temperature. Then the timer begins to count up.
7. Push the START/STOP key (7) to stop timer.
8. Remove the product.
9. Push HOLD (10) key to turn off hold mode.

Cook with Pulse:

NOTE: PULSE light is on when pulse mode is on and off when pulse mode is off.

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Enter cook time and cook temperature.
3. Press PULSE KEY (11). Enter the pulse time. A minimum of one minute must be entered to operate.

   NOTE: Pulse time is a portion of the cook time and does not increase the previously entered cook time.

4. Load product into oven.

   NOTE: The display reads LOAD with the oven is near the set temperature.

5. Push START/STOP KEY (7). The timer begins to count down the cook time. The oven will be in pulse mode for the set pulse time. Once the set time has expired, the unit will automatically switch to cook mode and continue counting down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
7. Push the START/STOP KEY (7) to turn the buzzer off.
8. Remove the product.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

   NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

Operation

Solid State Digital Control with Humidaire

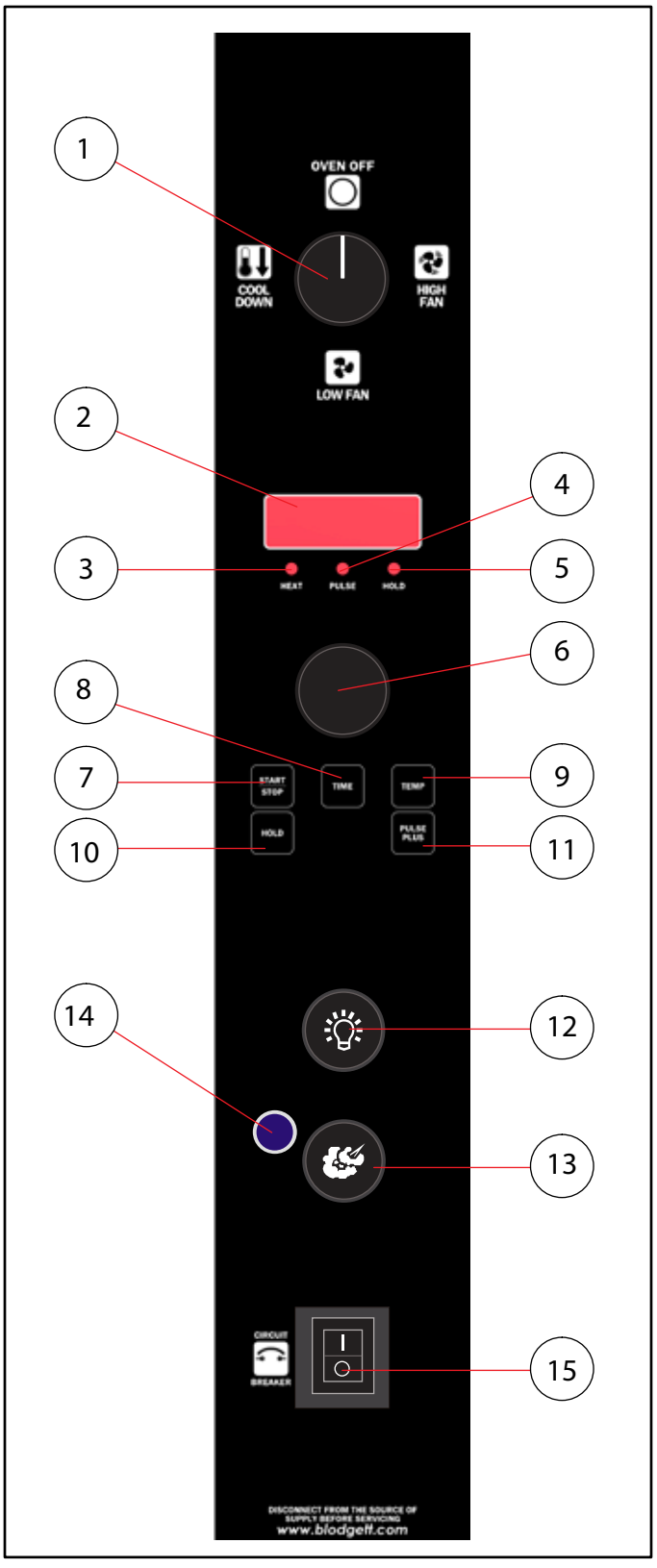


Figure 11

CONTROL DESCRIPTION

1. SELECTOR SWITCH - controls power to the oven for high fan, low fan or cool down.
2. DISPLAY - displays time or temperature and other information related to oven function.
3. HEAT LAMP - lights when heater is on.
4. PULSE LAMP - lights when Pulsed Fan Mode is turned on.
5. HOLD LAMP - lights when Hold Mode is turned on.
6. DIAL - used to enter set points in display
7. START/STOP KEY - starts or stops the timer.
8. TIME KEY - used to show time in the display.
9. TEMP KEY - used to show set temperature in the display.

   NOTE: Actual temperature is shown while the TEMP key is held down.
10. HOLD KEY - turns Hold Mode on or off.
11. PULSE KEY - turns Pulse Mode on or off.
12. LIGHTS SWITCH - controls interior lights.
13. HUMIDAIRE START SWITCH - activates moisture injection for a preset period of 30 seconds.
14. HUMIDAIRE LAMP - lights when water is being injected
15. CIRCUIT BREAKER SWITCH - controls power to the oven.

Solid State Digital Control with Humidaire

PROGRAMMING

To set the cook temperature:

1. Press TEMP (9) key.
2. Rotate dial (6) to enter temperature.

To set the cook time:

1. Press TIME (8) key.
2. Rotate the dial (6) to enter time.

   NOTE: Time is entered in hours:minutes (0:00) or minutes:seconds (00:00).

To set the hold time:

1. Press HOLD key (10) to turn hold mode on.

   NOTE: HOLD light is on.
2. Rotate dial (6) to enter the hold temperature.
3. Press START/STOP key (7)

To set the pulse time:

1. Press PULSE KEY (11) to turn pulse mode on.

   NOTE: Pulse light is on.
2. Rotate DIAL (6) to enter the pulse time. Pulse time is a portion of the pre-set cook time.

OPERATION

Cook Only:

1. Turn the SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Load product into the oven.

   NOTE: The display reads LOAD when the oven is near the set temperature.
4. Press the START/STOP key (7). The timer begins to count down.
5. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
6. Press the START/STOP key (7) to silence the buzzer.
7. Remove the product.

Cook with Hold:

NOTE: HOLD light is on when hold mode is on and off when hold mode is off.

1. Turn the SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Press the HOLD key (10). Enter the hold temperature.
4. Load product into the oven.

   NOTE: The display reads LOAD when the oven is near the set temperature.
5. Push the START/STOP (7) key. Timer begins to count down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE. The buzzer turns off after a few seconds. The display reads HOLD until the oven reaches the hold temperature. Then the timer begins to count up.
7. Push the START/STOP key (7) to stop timer.
8. Remove the product.
9. Push HOLD (10) key to turn off hold mode.

Cook with Pulse:

NOTE: PULSE light is on when pulse mode is on and off when pulse mode is off.

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Enter cook time and cook temperature.
3. Press PULSE KEY (11). Enter the pulse time. A minimum of one minute must be entered to operate.

   NOTE: Pulse time is a portion of the cook time and does not increase the previously entered cook time.
4. Load product into the oven.

   NOTE: The display reads LOAD when the oven is near the set temperature.

Solid State Digital Control with Humidaire

5. Push START/STOP KEY (7). The timer begins to count down the cook time. The oven will be in pulse mode for the set pulse time. Once the set time has expired, the unit will automatically switch to cook mode and continue counting down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
7. Push the START/STOP KEY (7) to turn the buzzer off.
8. Remove the product.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

   NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

The Humidaire Function:

Moisture may be injected into the oven cavity at any time during the cook cycle.

1. Press the HUMIDAIRE START SWITCH (13). Water injects into the oven cavity for 30 seconds. After the water stops injecting, the motor automatically turns off for 30 seconds. This enables the moisture to saturate the product. Once the humidaire cycle is complete, the oven resumes normal operation.

   NOTE: The oven must be above 230°F (110°C) for humidaire to operate.

The amount of water injected during the Humidaire cycle may be adjusted as follows:

1. Check the pressure gauge on the back of the oven while the water is dispensing. The pressure should be no higher than 3 psi. If less moisture is desired, the pressure can be set below 3 psi.
2. To adjust the water pressure, loosen the locknut on the pressure regulator.

   Turn the adjusting screw counter clockwise to decrease the water pressure.

   Turn the adjusting screw clockwise to increase the water pressure if it is below 3 psi.

   NOTE: Increasing the water pressure will increase the amount of water injected during the humidaire cycle. Decreasing the pressure will decrease the water injected during the humidaire cycle.
3. Reset the locknut on the regulator.
4. Recheck the water pressure.

⚠ **WARNING!!**

Setting the pressure above 3 psi will lead to excessive water in the oven.

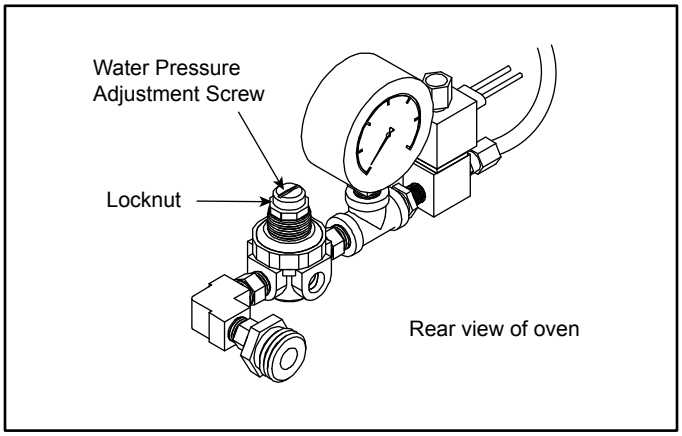


Figure 12

CH-Pro3 (Solid State Programmable Digital Control)

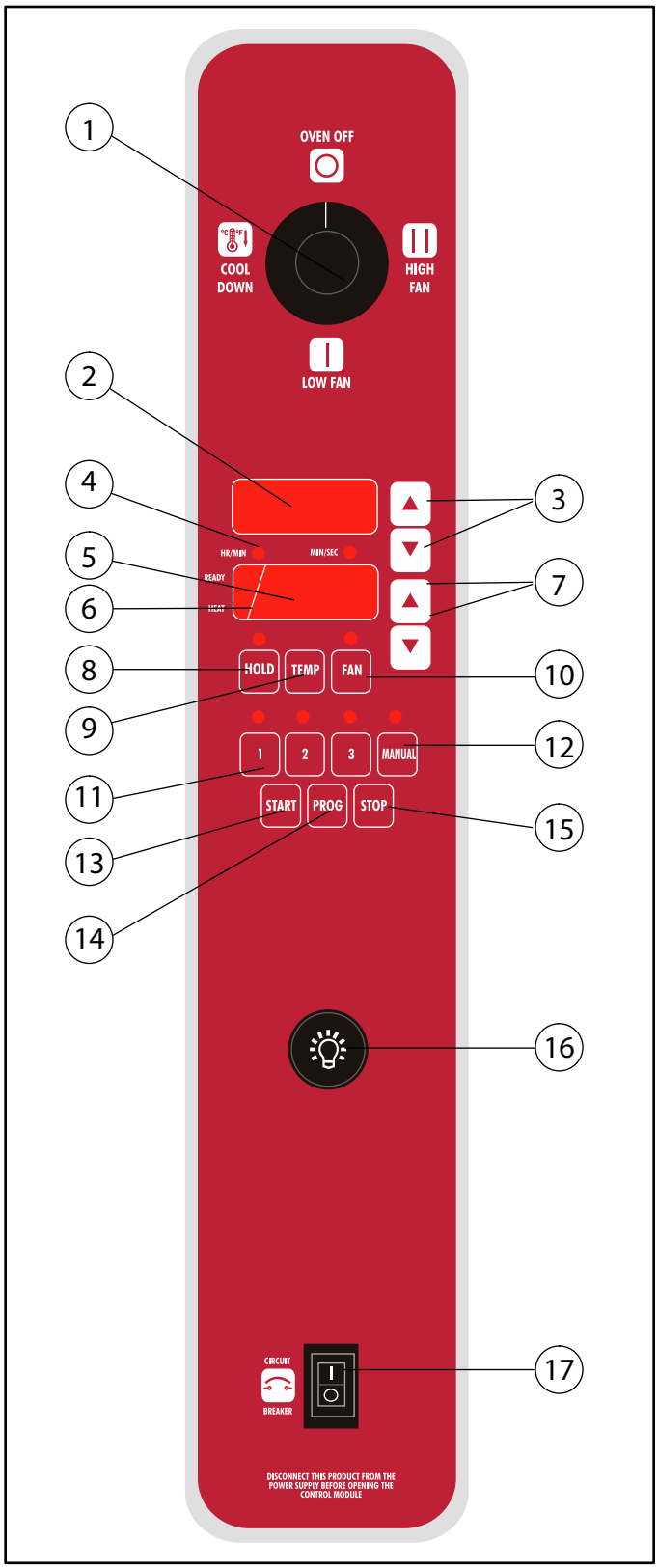


Figure 13

COMPONENT DESCRIPTION

1. SELECTOR SWITCH - controls power to the oven for high fan, low fan or cool down.
2. TIME DISPLAY - gives cook time.
3. TIME ARROW KEYS - press to enter cook and/or pulse times.
4. READY INDICATOR - when lit indicates the oven has reached the setpoint temperature and product may be loaded.
5. TEMPERATURE DISPLAY - gives cook and hold temperatures.
6. HEAT INDICATOR - when lit indicates the oven is heating.
7. TEMPERATURE ARROW KEYS - press to enter cook and hold temperatures.
8. HOLD KEY - turns hold mode on or off.
9. TEMP KEY - press to display actual oven temperature.
10. FAN KEY - turns pulse mode on or off. The LED above the fan key is always on.
11. PRODUCT KEYS - three programmable keys.
12. MANUAL PRODUCT KEY - default product key used for manual operation.
13. START KEY - press to begin a cook cycle.
14. PROGRAM KEY - press to enter programming mode and save programmed settings.
15. STOP KEY - press to silence audible alarms and cancel cook cycles.
16. LIGHTS SWITCH - controls interior lights.
17. CIRCUIT BREAKER SWITCH - controls power to the oven.

Operation

CH-Pro3 (Solid State Programmable Digital Control)

MANUAL OPERATION

NOTE: Press the arrow keys to change the cook time and temperature at any point duringmanual operation.

Cook Only:

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the TIME ARROW KEYS (3) to enter the cook time.
3. Press the TEMPERATURE ARROW KEYS (7) to enter the cook temperature.
4. The READY INDICATOR (4) lights when the oven is at the set temperature. Load product into the oven.
5. Press the START KEY (13). The TIME DISPLAY (2) counts down. The manual key LED flashes.
6. When the cook time expires the LEDs and both displays flash and an audible alarm sounds. Press the STOP KEY (15) to silence the alarm.
7. Remove the product.

Cook with Hold:

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the TIME ARROW KEYS (3) to enter the cook time.
3. Press the TEMPERATURE ARROW KEYS (7) to enter the cook temperature.
4. Press and hold the HOLD KEY (8) then release. Use the TEMPERATURE ARROW KEYS (7) to enter the hold temperature. The hold key LED lights. Press the hold key again to exit the hold mode.
5. The READY INDICATOR (4) lights when the oven is at the set temperature. Load product into the oven.
6. Press the START KEY (13). The TIME DISPLAY (2) counts down. The manual key LED flashes.
7. When the cook time expires both displays flash and an audible alarm sounds for several seconds then self cancels. The hold key LED flashes. The time display begins to count up while the oven cools to the hold temperature. When the oven reaches the hold temperature the time display resets to 00:00 then begins to count up the hold time. The fan cycles with heat demand in the hold mode.
8. Press the STOP KEY (15) to stop the timer.
9. Remove the product.
10. Push the HOLD KEY (8) to turn off hold mode.

Cook with Pulse:

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the TIME ARROW KEYS (3) to enter the cook time.
3. Press the TEMPERATURE ARROW KEYS (7) to enter the cook temperature.
4. Press the FAN KEY (10) for five seconds. The TEMPERATURE DISPLAY (5) goes blank. The fan key LED flashes. Use the TIME ARROW KEYS (3) to enter the pulse time.

   NOTE: Pulse time is a portion of the cook time and does not increase the previously entered cook time.
5. Press the FAN KEY (10) again. The TEMPERATURE DISPLAY (5) lights.
6. The READY INDICATOR (4) in the temperature display lights when the oven is at the set temperature. Load product into the oven.
7. Press the START KEY (13). The manual key LED flashes. The TIME DISPLAY (2) counts down the cook time. The fan cycles on for 30 seconds then off for 30 seconds until the set pulse time has expired.
8. When the pulse time expires both displays flash and an audible alarm sounds. Press the STOP KEY (15) to silence the alarm.
9. Remove the product.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

   NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

CH-Pro3 (Solid State Programmable Digital Control)

PROGRAMMING THE MANUAL KEY DEFAULT

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the MANUAL KEY (12). The manual and fan key LEDs light.
3. Press the TIME ARROW KEYS (3) to enter the cook time.
4. Press the TEMPERATURE ARROW KEYS (7) to enter the cook temperature.
5. For Cook and Hold - Press and hold the HOLD KEY (8). Use the TEMPERATURE ARROW KEYS (7) to enter the hold temperature. The hold key LED lights. Press the hold key again to exit the hold mode.

   For Cook with Pulse - Press the FAN KEY (10). Use the TIME ARROW KEYS (3) to enter the pulse time. If no pulse is required, leave pulse time at 0:00. The fan key LED flashes. Press the fan key again to exit fan mode.
6. Press the PROGRAM KEY (14) to save the program settings.

MANUAL KEY DEFAULT OPERATION

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the MANUAL KEY (12). The applicable LEDs light.
3. Press the START KEY (13). The TIME DISPLAY (2) counts down. The manual key LED flashes.

   NOTE: In Cook with Pulse the fan LED flashes.

   NOTE: Press the arrow keys to change the cook time and temperature at any point during manual key operation.
4. When the cook time expires the applicable LEDs and both displays flash and an audible alarm sounds.
5. Press the STOP KEY (15) to silence the alarm.

   NOTE: In Cook & Hold the alarm self cancels. The oven cools to the hold temperature and the time display counts up.
6. Remove the product.
7. Turn the SELECTOR SWITCH (1) to OFF to shut down the oven.

PROGRAMMING THE PRODUCT KEYS

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the desired PRODUCT KEY (11). The product and fan key LEDs light.
3. Press and hold the PROGRAM KEY (14) until the corresponding LED flashes, approximately five seconds.
4. Press the TIME ARROW KEYS (3) to enter the cook time.
5. Press the TEMPERATURE ARROW KEYS (7) to enter the cook temperature.
6. For Cook and Hold - Press and hold the HOLD KEY (8). Use the TEMPERATURE ARROW KEYS (7) to enter the hold temperature. The hold key LED lights. Press the hold key again to exit the hold mode.

   For Cook with Pulse - Press the FAN KEY (10). Use the TIME ARROW KEYS (3) to enter the pulse time. If no pulse is required, leave pulse time at 0:00. The fan key LED flashes. Press the fan key again to exit the fan mode.
7. Press the PROGRAM KEY (14) to save the program settings.

PRODUCT KEY OPERATION

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Press the desired PRODUCT KEY (11). The applicable LEDs light.
3. Press the START KEY (13). The TIME DISPLAY (2) counts down. The product key LED flashes.

   NOTE: In Cook with Pulse the fan LED flashes.
4. When the cook or pulse time expires the applicable LEDs and both displays flash and an audible alarm sounds.
5. Press the STOP KEY (15) to silence the alarm.

   NOTE: In Cook & Hold the alarm self cancels. The oven cools to the hold temperature and the time display counts up.
6. Remove the product.
7. Turn the SELECTOR SWITCH (1) to OFF to shut down the oven.

Operation

Blodgett IQ2™ Vision Control

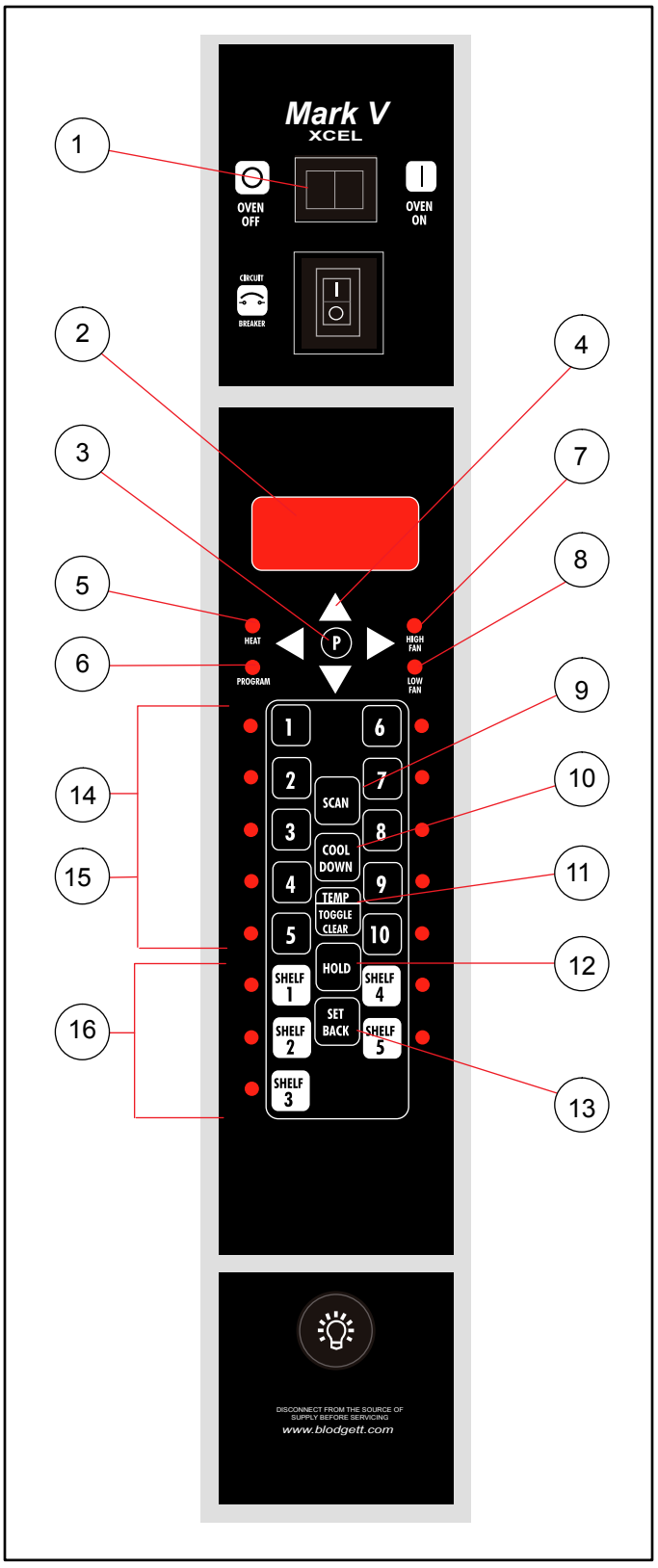


Figure 14

COMPONENT DESCRIPTION

1. OVEN POWER SWITCH - controls power to the oven.
2. DISPLAY - displays temperature and other controller related information.
3. PROGRAM KEY - press to enter the programming mode.
4. PROGRAM ARROW KEYS - use to move through programming menus and options
5. HEAT LED - when lit indicates the control is calling for heat.
6. PROG LED - when lit indicates the controller is in the programming mode.
7. HIGH FAN LED - when lit indicates the fan is running at high speed.
8. LOW FAN LED - when lit indicates the fan is running at low speed.
9. SCAN KEY - Press to view time remaining on multiple cook cycles and to review recipe programming.
10. COOL DOWN KEY - press to enter the cool down mode.
11. TEMP/TOGGLE/CLEAR KEY - press during programming to toggle options.
12. HOLD KEY - press to enter hold mode.
13. SET BACK KEY -
14. PRODUCT KEYS (1-10) - assigns a key to a programmed recipe and begins a programmed cooking process. Also used to enter numeric values in the programming mode.
15. PRODUCT LEDS - when lit indicate which product keys are currently in use or programmed for the current oven temperature and fan speed.
16. SHELF KEYS (1-5) - assigns a shelf key.

OVEN OPERATION

Oven Startup:

1. Toggle the POWER SWITCH (1) to ON. The display gives the software revision level. The oven preheats to the lowest programmed first stage temperature. The LEDS (15) for all products with the same first stage temperature light.

Single Product Cooking Procedure:

NOTE: If the led next to the desired product key is lit skip step 1.

1. Press the desired PRODUCT KEY (14). The oven preheats to the first stage temperature for the selected product. When the oven reaches 10° of the preheat temperature an alarm sounds and the DISPLAY (2) read:

LOAD

2. Load the product into the oven. Press the desired PRODUCT KEY (14).

3. **If the shelf timing function is toggled to the on position for that product key**, the DISPLAY (2) reads:

PICK SHLF

Press a SHELF KEY (16) to assign the product to that shelf and start the cook cycle. Within five seconds, the DISPLAY (2) scrolls the product name and shelf number and counts down the remaining cook time.

If the shelf timing function is toggled to the off position for that product, pressing the product key will start the cook cycle. The DISPLAY (2) scrolls the product name and counts down the remaining cook time.

NOTE: If the selected product has a cook time of greater than 59:59 the DISPLAY (2) switches to hours:minutes.

NOTE: If the selected product is a single stage recipe the LEDS for all single stage products with the same cook temperature and fan speed will light. If the selected product is a multiple stage recipe no other product LEDS will light.

NOTE: Press and hold the selected product key for three seconds to cancel the cook cycle for normal operation. To cancel the cook cycle when using shelf timing, press and hold the corresponding SHELF KEY (16) for 3 seconds.

4. When the cook time expires an alarm sounds and the DISPLAY (2) reads:

DONE *Product name*

5. Press the selected product key to silence the alarm. Remove the product. If shelf timing is used, press the flashing SHELF KEY (16) to silence the alarm.

Multiple Batch Cooking Procedure:

This procedure is for single stage recipes with the same cook temperature and fan speed only.

NOTE: If the led next to the first desired product key is lit skip step 1.

1. Press the first desired PRODUCT KEY (14). The LEDS for all recipes with the same cook temperature and fan speed will light.

   The oven preheats to the cook temperature for the selected product. When the oven reaches ±10° of the preheat temperature an alarm sounds and the DISPLAY (2) reads:

LOAD

Blodgett IQ2™ Vision Control

2. Load the product into the oven. Press the desired PRODUCT KEY (14).

   If the shelf timing function is toggled to the on position for that product key, the DISPLAY (2) reads

PICK SHLF

   Press a SHELF KEY (16) to assign the product to that shelf and start the cook cycle. Within five seconds, the DISPLAY (2) scrolls the product name and shelf number and counts down the remaining cook time.

   If the shelf timing function is toggled to the off position for that product, pressing the product key will start the cook cycle. The DISPLAY (2) scrolls the product name and counts down the remaining cook time.

3. Load the second product. Press the desired PRODUCT KEY (14). the DISPLAY (2) reads

PICK SHLF

   Press a SHELF KEY (16) to assign the product to that shelf and start the cook cycle for product two.

   NOTE: Only products with lighted LEDS may be selected.

   Repeat step 3 for additional products.

4. The DISPLAY (2) scrolls the product name and counts down the remaining cook time for the product with the least time remaining.

   NOTE: To view the remaining cook time for the other products press and hold the SCAN KEY (9). The display cycles through the remaining cook times for each product. Only the led for the product with the cook time displayed will be lit.

5. When a cook time expires an alarm sounds. The display reads

DONE

   The led for the finished product lights. All other LEDS are dark.

6. Press the SHELF KEY (16) for the finished product to silence the alarm. Remove the product. Close the oven door. The DISPLAY (2) scrolls the product name and counts down the remaining cook time for the product with the least time remaining.

7. When the cook time expires an alarm sounds and the display reads:

DONE

8. Press the SHELF KEY (16) to silence the alarm. Remove the product.

Oven Cool Down:

1. Close the oven door. Press the COOL DOWN KEY (10).

   NOTE: Cool down cannot be activated with the oven door open. Once the cool down cycle has begun the doors may be opened to speed the cooling process.

To Review Repipe Programming:

1. Press the SCAN KEY (9). The display reads:

RECIPE REVIEW *Select Product*

   The LEDs (15) for all previously programmed product keys light. Press the PRODUCT KEY (14) you wish to review. The display gives the recipe cook time for stage 1. Use the PROGRAM ARROW KEYS (4) to scroll through the recipe programming for the selected product key.

2. The control will exit recipe review after 30 seconds if no key is pressed.

PRODUCT KEY PROGRAMMING

To enter the product programming mode

1. Press and hold the PROGRAM KEY (3). The DISPLAY (2) reads:

Prod Cnt Programming

Use the PROGRAM ARROW KEYS (4) to highlight Programming. Press the PROGRAM KEY (3) to select. The display reads:

ENTER CODE

Use the PRODUCT KEYS (14) to enter the programming access code 1724. Press the PROGRAM KEY (3). The display reads:

RECIPE

Press the PROGRAM KEY (3). All of the product LEDSs will light and the display reads:

Select Product to Program

To select the product to program

2. Press the desired product key. The display reads:

All Name

With All highlighted, press the PROGRAM KEY (3). The display reads:

Product Name AAA

The first alphabetical listing in the product name library appears.

3. To change the product name, use the PROGRAM ARROW KEYS (4) to scroll through the product name library. When the desired product name is highlighted, press the PROGRAM KEY (3) to select.

To program the product

4. The display reads:

Shelf Cook AAA

Definition: Shelf cook enables the operator to reference product to one of the five shelf positions in the oven. At the end of a shelf cooking cycle the oven will display the name of the product and the shelf number that is ready to be pulled. **Shelf cooking is not available for multi-stage recipes.**

Use non shelf cooking when you do not need to reference product to one of the five shelf positions in the oven. Non shelf cooking may be used for single stage recipes and **MUST be use for multi-stage recipes.**

Use the PROGRAM ARROW KEYS (4) to select either YES (for shelf cooking) or NO (for non shelf cooking). Press the PROGRAM KEY (3).

5. The display reads:

Stage 1 Time XX:XX

Use the PRODUCT KEYS (14) to enter the desired cook time. Press the PROGRAM KEY (3).

6. The display reads:

Stage 1 Temp XXXF (or C)

Use the PRODUCT KEYS (14) to enter the desired cook temperature. Press the PROGRAM KEY (3).

Blodgett IQ2™ Vision Control

7. The display reads:

Stage 1 Timing XX:XX

Definition: There are 3 options for timing mode when shelf cooking: Straight, Flex and Sensitivity. Straight has no time adjustment. Flex adjusts the cook time to compensate for any difference between the setpoint and actual temperature. Sensitivity enables a product key to have a flex adjustment for each of the five shelves. Sensitivity values are set in the manager level programming.

NOTE: Sensitivity is only available when using shelf cooking.

Use the PROGRAM ARROW KEYS (4) to select the desired timing mode. Press the PROGRAM KEY (3).

8. The display reads:

← Stage 1 Fan Speed XX →

Use the PROGRAM ARROW KEYS (4) to select either HIGH or LOW fan speed. Press the PROGRAM KEY (3).

9. The display reads:

← Stage 1 Fan Cyc XXX →

Definition: There are 3 options for fan cycle time: Pulse, Heat and Full. Pulse allows the fan to turn on and off as programmed. Heat allows the fan to operate with heat only. Full provides continuous fan operation when door is closed.

Use the PROGRAM ARROW KEYS (4) to select the fan cycle. If heat or full are selected skip to step 10. If pulse is selected the display reads:

Stage 1 Fan On XX:XX

Use the PRODUCT KEYS (14) to enter the desired length of the time the fan should be on in the pulse cycle. Press PROGRAM KEY (3). The display reads:

Stage 1 Fan Off XX:XX

Use the PRODUCT KEYS (14) to enter the desired length of the time the fan should be off in the pulse cycle. Press the PROGRAM KEY (3).

10. If you are programming a product using shelf cooking skip to step 11.

    If you are programming a product that does not use shelf cooking the display reads:

Stage 2 Time XX:XX

Repeat steps 5 through 10 for each remaining stage. If you are programming a single stage recipe without shelf cooking enter at time of 00:00 for stage 2.

11. The display reads:

Alarm 1 Time XX:XX

Definition: If you would like the alarm to sound prior to the completion of the cook cycle you may program it here. The alarm time counts up from the beginning of the cook cycle. For example, if you want an alarm 9 minutes into the cook cycle, program the alarm time at 9:00.

Use the PRODUCT KEYS (14) to enter the time for the first alarm to sound. If 00:00 is entered for an alarm time, skip to step 12.

Press the PROGRAM KEY (3). If a time other than 00:00 is entered the display reads:

Alarm 1 Name
AAA

To change the alarm name, use the PROGRAM ARROW KEYS (4) to scroll through the alarm name library.

Press the PROGRAM KEY (3). The display reads:

Alarm 1 Done
XXX

Use the PROGRAM ARROW KEYS (4) to select either AUTOMATIC or MANUAL.

Press the PROGRAM KEY (3). The display reads:

Alarm 1 Tone
XXX

Use the PROGRAM ARROW KEYS (4) to select either NONE, SHORT, MEDIUM, LONG, DOUBLE, or LONG/SHORT.

Press the PROGRAM KEY (3). The display reads:

Alarm 2 Time
AAA

Repeat step 11 for alarm 2. If no Alarm 2 is desired, enter a time of 0.

12. Press the PROGRAM KEY (3). The display reads:

Hold Time
XX:XX

Use the PRODUCT KEYS (14) to enter desired hold time. If a hold time of 00:00 is entered skip to step 13.

Press the PROGRAM KEY (3).

13. The display reads:

Hold Temp
XXXF

Use the PRODUCT KEYS (14) to enter desired hold temperature. The minimum hold temperature is 140F. Press the PROGRAM KEY (3).

14. The display reads:

Hold Done
XXX

Use the PROGRAM ARROW KEYS (4) to select either AUTOMATIC or MANUAL. Press the PROGRAM KEY (3).

15. The display reads:

Hold Fan Speed
XXX

Use the PROGRAM ARROW KEYS (4) to select HIGH or LOW. Press the PROGRAM KEY (3).

To exit the program mode

16. The display reads:

Exit
All

Use the PROGRAM ARROW KEYS (4) to scroll down until exit is highlighted. Press the PROGRAM KEY (3). The display reads:

Recipe
Exit

To program another product key select recipe. To exit the progam mode select exit. The display reads:

Product Cnt
Programming

Use the PROGRAM ARROW KEYS (4) to scroll down until exit is highlighed. Press the PROGRAM KEY (3) to exit the programming mode.

Blodgett IQ2™ Vision Control

SYSTEM LEVEL PROGRAMMING

Entering the system programming mode

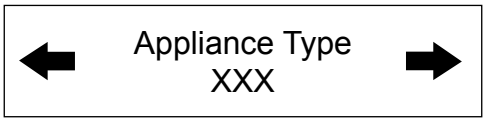
1. Press and hold the PROGRAM KEY (3). The display reads:

Use the PROGRAM ARROW KEYS (4) to highlight Programming. Press the PROGRAM KEY (3) to select. The display reads:

Use the PRODUCT KEYS (14) to enter the programming access code 6647. Press the PROGRAM KEY (3). The display reads:

Programming the SYSTEM options

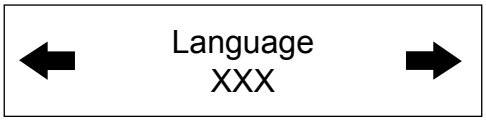
1. With System highlighted, press the PROGRAM KEY (3) to select. The display reads:



Use the PROGRAM ARROW KEYS (4) to highlight electric half, electric full, gas half or gas full. Press the PROGRAM KEY (3) to select the correct appliance type.

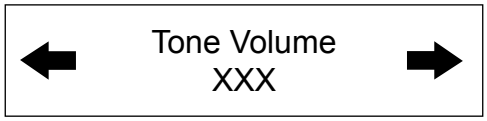
If the appliance type is changed the display scrolls “Are you sure, existing recipes will be cleared?” Use the PROGRAM ARROW KEYS (4) to select either YES or NO.

2. The display reads:



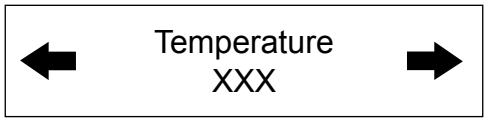
Use the PROGRAM ARROW KEYS (4) to selecteither English or Other. Press the PROGRAM KEY (3) to select the desired language.

3. The display reads:



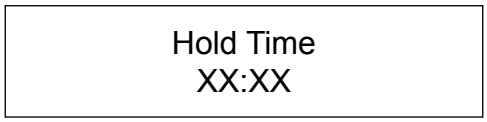
Use the PROGRAM ARROW KEYS (4) to select None, 1, 2, 3 or 4. Press the PROGRAM KEY (3) to select the desired level for all audible signals.

4. The display reads:



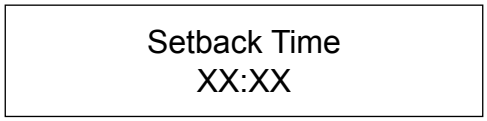
Use the PROGRAM ARROW KEYS (4) to select either F or C. Press the PROGRAM KEY (3) to select the desired temperature units.

5. The display reads:



Use the PRODUCT KEYS (14) to enter a hold time. Press the PROGRAM KEY (3).

6. The display reads:



Definition: Setback time is an energy savings feature that automatically lowers the cavity temperature when the oven is idle.

Use the PRODUCT KEYS (14) to enter a setback time. Press the PROGRAM KEY (3).

7. The display reads:

Definition: If you are using sensitivity as a timing mode for single stage stage recipes this feature must be turned on.

Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

8. The display reads:

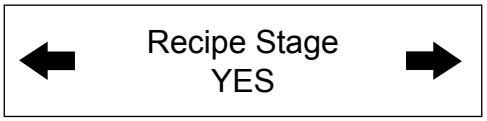
Use the PRODUCT KEYS (14) to enter sensitivity level of 1-9 for shelf 1. Press the PROGRAM KEY (3). Repeat for shelves 2-5.

9. The display reads:

Definition: This function programs time for the oven to idle after reaching the preheat temperature allowing heat to saturate the oven cavity. The preheat time only applies to the initial preheat after a cold start. This is strictly a prompt, the user may begin a bake cycle even with the preheat prompt displayed.

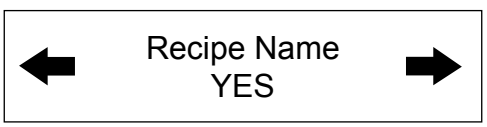
Use the PRODUCT KEYS (14) to enter a preheat time. Press the PROGRAM KEY (3).

10. The display reads:



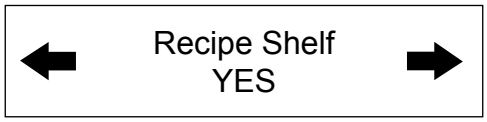
Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

11. The display reads:



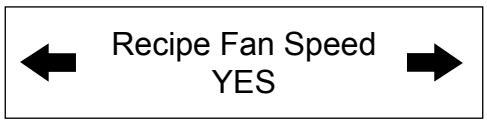
This enables you to program a product name. Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

12. The display reads:



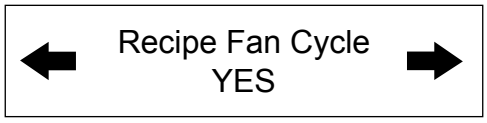
Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

13. The display reads:



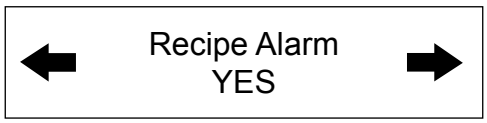
Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

14. The display reads:



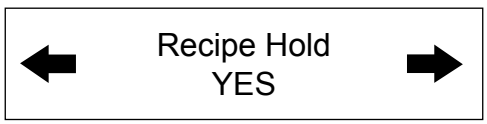
Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

15. The display reads:



Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

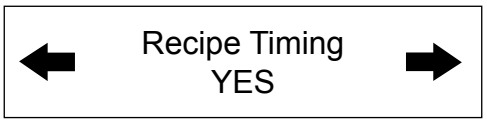
16. The display reads:



Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

Blodgett IQ2™ Vision Control

17. The display reads:



Use the PROGRAM ARROW KEYS (4) to select either Yes or No. Press the PROGRAM KEY (3).

18. The display reads

Definition: There are 3 options for timing mode when shelf cooking: Straight, Flex and Sensitivity. Straight has no time adjustment. Flex adjusts the cook time to compensate for any difference between the setpoint and actual temperature. Sensitivity enables a product key to have a flex adjustment for each of the five shelves. Sensitivity values are set in the manager level programming.

Use the PROGRAM ARROW KEYS (4) to select the timing mode. Press the PROGRAM KEY (3).

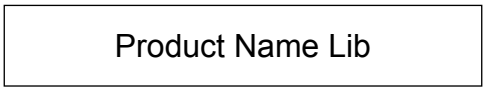
Programming the PRODUCT NAME

NOTE: Use these instructions to modify an existing name, to add a product name or to delete a name already in the library.

NOTE: Names may be up to 16 characters long and can contain letters and numbers.

1. After entering the manager level programming (see page 36) the display reads:

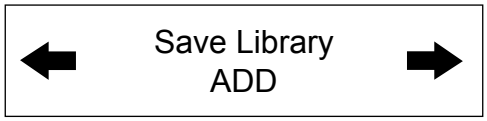
With ProdName Lib highlighted, press the PROGRAM KEY (3) to select. The display reads:



2. Use the up and down PROGRAM ARROW KEYS (4) to scroll through the existing product names. Or press the PRODUCT KEY (14) that corresponds with the first letter of the name you are looking for. Then use the PROGRAM ARROW KEYS (4) to scroll to the desired name.
3. Press the SCAN KEY (9) to edit the name.
4. Use the PRODUCT KEYS (14) to edit the product name. Press the right arrow key to advance to the next character.

   To clear the product name, press the TEMP/TOGGLE/CLEAR KEY (11).

   NOTE: Use product key 1 for spaces, periods, quotation marks and underlines.
5. Once the product name has been entered, press the PROGRAM KEY (3). The display reads:



Use the PROGRAM ARROW KEYS (4) to select either ADD, MODIFY or CANCEL. Select ADD to create a new product name. Select MODIFY to change an existing product name. Select CANCEL to exit the edit mode without saving your changes.

NOTE: To delete an exsisting product name, find the name in the product library. Press the TEMP/TOGGLE/CLEAR KEY (11) to clear the entire product name. Then select MODIFY to overwrite the name with a clear screen.

6. Press the PROGRAM KEY (3) to exit the product name library.

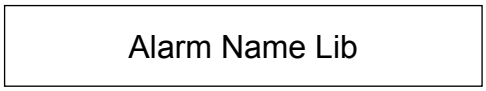
Programming the ALARM NAME

NOTE: Use these instructions to modify an existing name, to add an alarm name or to delete a name already in the library.

NOTE: Names may be up to 16 characters long and can contain letters and numbers.

1. After entering the system level programming (see page 36) the display reads:

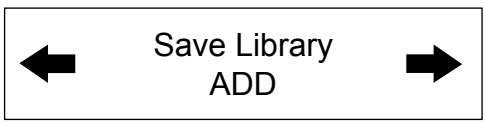
Use the PROGRAM ARROW KEYS (4) to highlight Alarm Lib. Press the PROGRAM KEY (3) to select. The display reads:



2. Use the up and down PROGRAM ARROW KEYS (4) to scroll through the existing alarm names. Or press the PRODUCT KEY (14) that corresponds with the first letter of the name you are looking for. Then use the PROGRAM ARROW KEYS (4) to scroll to the desired name.
3. Press the SCAN KEY (9) to edit the name.
4. Use the PRODUCT KEYS (14) to edit the alarm name. Press the right arrow key to advance to the next character.

   To clear the alarm name, press the TEMP/TOGGLE/CLEAR KEY (11).

   NOTE: Use product key 1 for spaces, periods, quotation marks and underlines.
5. Once the alarm name has been entered, press the PROGRAM KEY (3). The display reads:



Use the PROGRAM ARROW KEYS (4) to select either ADD, MODIFY or CANCEL. Select ADD to create a new alarm name. Select MODIFY to change an existing alarm name. Select CANCEL to exit the edit mode without saving your changes.

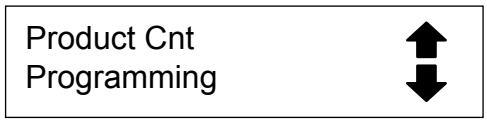
NOTE: To delete an exsisting alarm name, find the name in the product library. Press the TEMP/TOGGLE/CLEAR KEY (11) to clear the entire alarm name. Then select MODIFY to overwrite the name with a clear screen.

6. Press the PROGRAM KEY (3) to exit the alarm name library.

Exiting the system program mode

1. The display reads:

Use the PROGRAM ARROW KEYS (4) to scroll up until Exit is highlighted. Press the PROGRAM KEY (3). The display reads:



Use the PROGRAM ARROW KEYS (4) to scroll up until Exit is highlighted. Press the PROGRAM KEY (3) to exit the programming mode.

SmartTouch Touchscreen Control

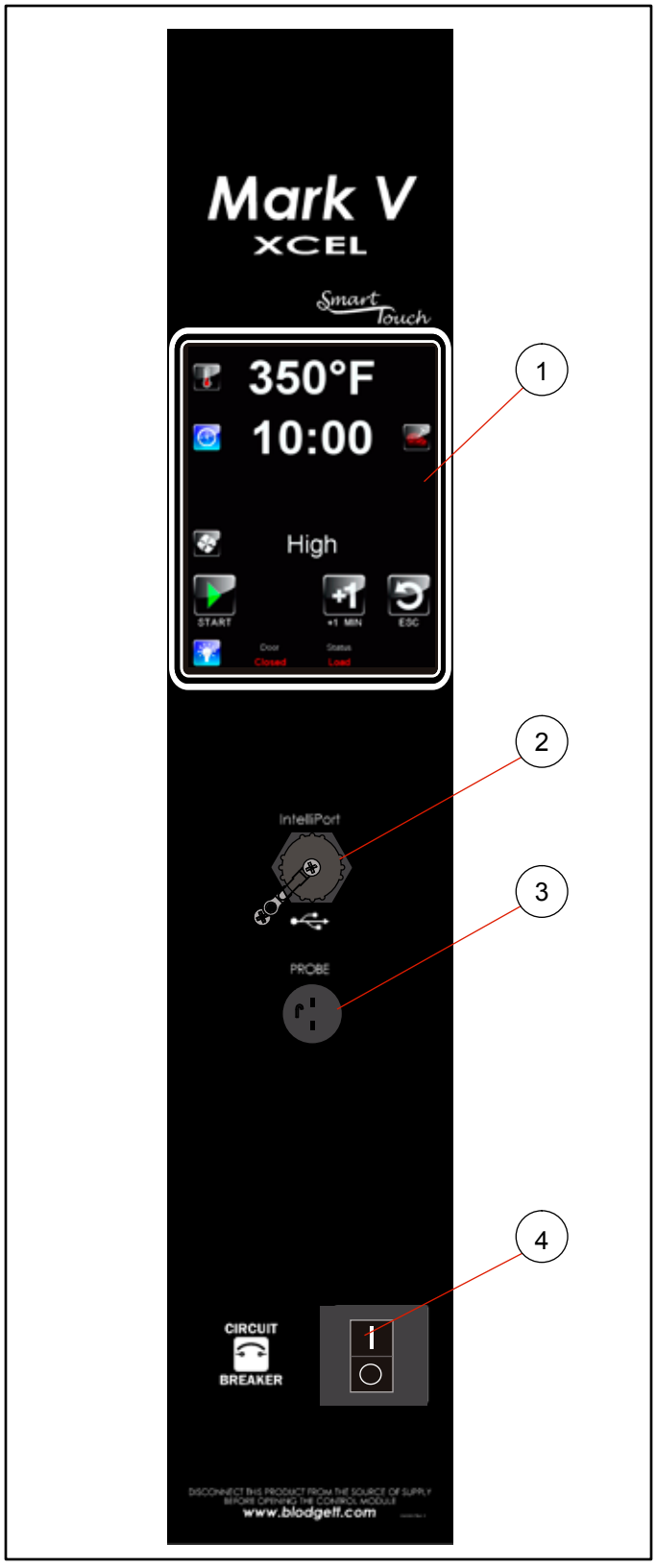


Figure 15

COMPONENT DESCRIPTION

1. DISPLAY - displays controller related information.
2. USB PORT and COVER - Use to transfer recipes and data to/from the control
3. CORE PROBE CONNECTION - plug core temperature probe in here when using probe cooking
4. OVEN POWER SWITCH - controls power to the oven.

MANUAL MODE COOKING

1. Select the POWER button to turn on the oven and proceed to the manual screen.

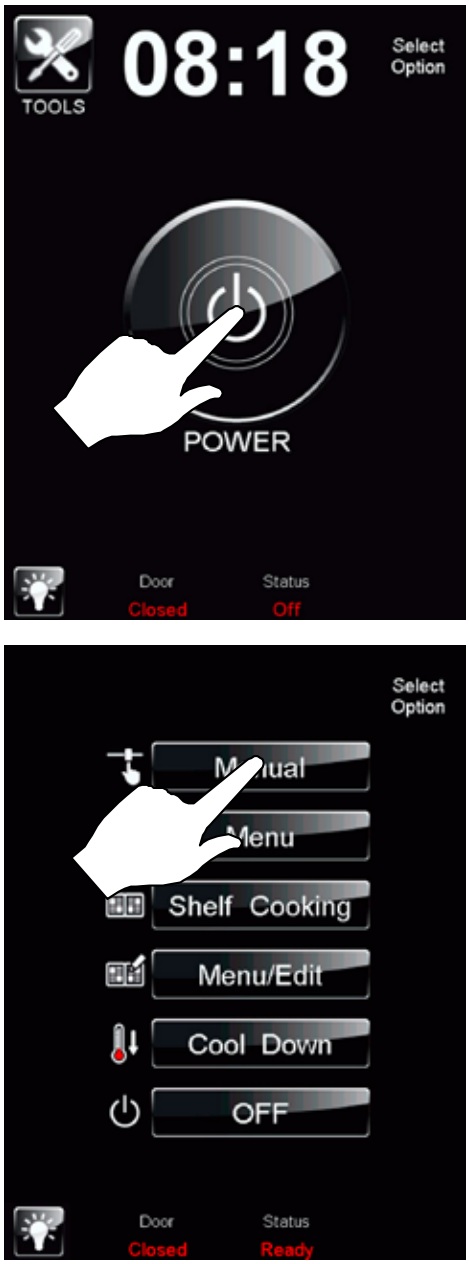


Figure 16

2. Set the desired cook settings.

   A) Temperature - Press the temperature text and enter the desired oven temperature on the keypad provided. Press SAVE & EXIT key to return to this screen.

   B) Cook Time - Press the time text and enter the desired cook time on the keypad provided. Press SAVE & EXIT to return to this screen.

   C) Core Probe Cooking - To use the core probe cooking feature, press the PROBE COOK icon. Press the temperature text that appears and enter the desired product core temperature on the keypad provided. Press SAVE & EXIT key to return to the manual cook screen. Insert a product probe in the probe outlet on the control panel. To use the HOLD option, press the HOLD key. Once activated, key will be blue. To escape from probe cooking press the time icon.

   D) Fan Speed - Press the fan speed text to toggle between Low or High.

   E) Lights - At any time the lights can be turned on by pressing the LIGHT icon. The lights will remain on for 15 seconds.

Figure 17

3. Press START Icon to begin cooking. Press Cancel key to stop cooking. Press +1 MIN to add 1 minute to the cook time.

SmartTouch Touchscreen Control

MENU MODE COOKING

1. On a manual screen, press the ESC key to exit.
2. Select the MENU key to cook using the preprogrammed menu items.

Figure 18

3. Push the SELECT ITEM PRODUCT ICON in the top right corner of the screen

Figure 19

4. Select the desired food category for your product.

Figure 20

5. Within the food category, select the desired product you wish to cook.

Figure 21

6. Once selected the control returns to the Menu Cooking screen. Press the START KEY to begin the cook cycle.

SHELF COOKING

1. Select the SHELF COOKING key.

Figure 22

2. Select item icon in the upper right corner to select which item to cook. Select which shelves you intend to place the selected food item on. Press selected item icon in the upper right corner of the screen to add different items that share the same cook temperature but may have different cook times.

   Once preheated, start icons will appear. You can choose start all or start individual shelves.

Figure 23

3. During the cook cycle, individual shelf cook timers will count down as the product is cooked. If you wish to cancel the bake, you can press the PAUSE key, or you can pause individual shelves.

   To add time, select +1 MIN key for individual shelves or +1 MIN ALL key to add time to all shelves. Each time the key is pressed, 1 minute of cook time is added.

   Press STOP again to reset to the original values. CLEAR ALL to clear all products from all shelves. All Shelves must be cleared to escape the screen.

   Once the bake is complete the beeper will sound.

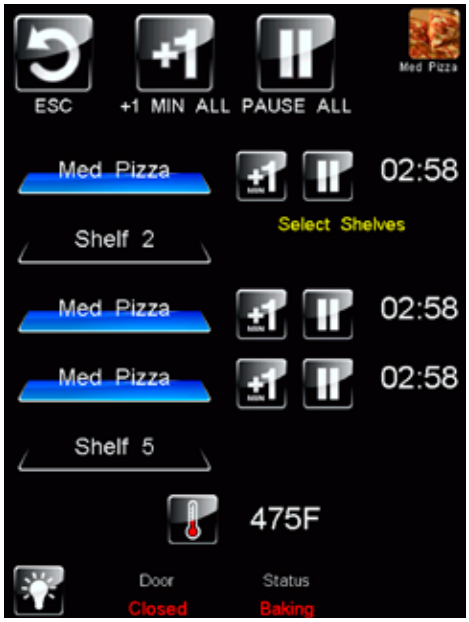


Figure 24

SmartTouch Touchscreen Control

EDITING A MENU

1. Select the MENU/EDIT icon to edit the recipes in the menu mode.

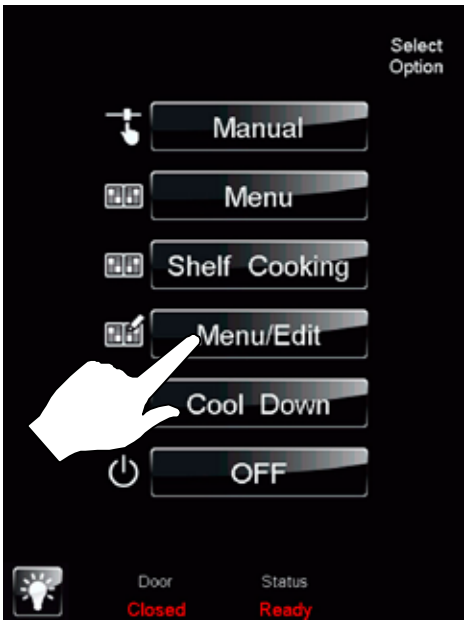


Figure 25

2. Select the EDIT ITEMS icon to edit the menu items.

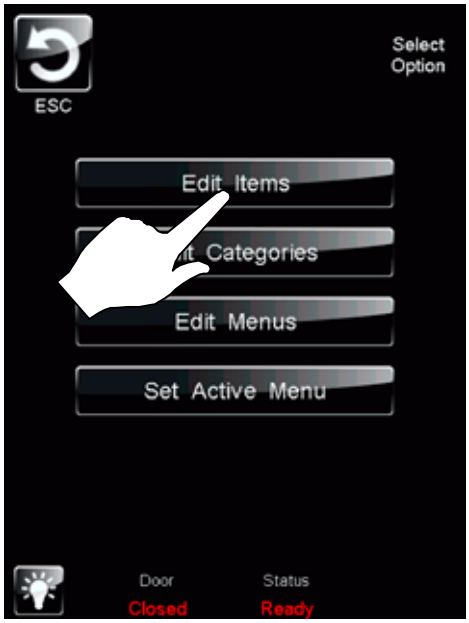


Figure 26

3. To edit an existing item, select the item while the EDIT key at the bottom is highlighted.

   To delete an Item, select the item while the DELETE key is highlighted.

   To create a new item, select the NEW ? icon while the EDIT key is highlighted.

Figure 27

4. Each recipe is made up of steps containing four settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

   To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

   To add a step, press the + key icon.

   To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

   To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

   Once you are finished, press the DISK icon to save the changes.

Figure 28

SmartTouch Touchscreen Control

EDITING A CATEGORY

1. Select the MENU/EDIT icon to edit the recipes in the menu mode.

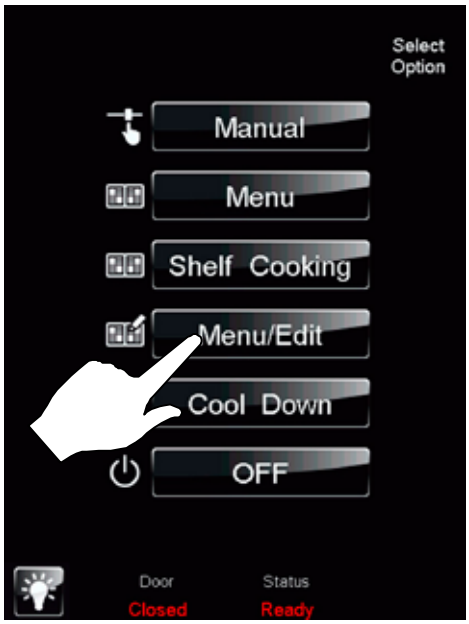


Figure 29

2. Select the EDIT CATEGORIES icon to select which items are in each category.

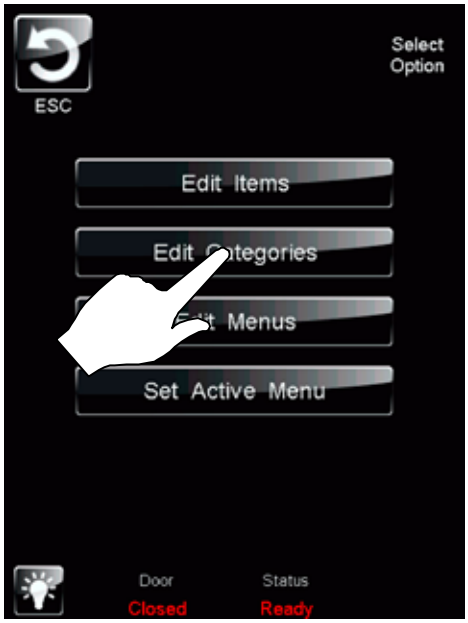


Figure 30

3. To edit an existing category, select the category while the EDIT key is highlighted.

   To delete a category, select the category while the DELETE key is highlighted.

   To create a new category, select the NEW ? icon while the EDIT key is highlighted.

Figure 31

4. Select what you would like to edit.

   To edit the name, press the EDIT NAME key. A keyboard will appear, enter the desired name and press ENTER to return to this menu.

Figure 32

5. To edit the category icon, press the category icon displayed in the category edit screen. The Select Icon screen is displayed. Select the desired icon. To view more icon options, press the arrow key.

   Once the category icon is selected, the category edit screen is displayed. Press the DISK icon to save your changes.

Figure 33

6. To edit items within a category, press the SELECT ITEMS key on the edit category screen.

   Select the items you would like to appear within the category. When complete, press ESC key to return to the previous menu. Press the DISK icon to save your changes.

Figure 34

SmartTouch Touchscreen Control

CREATING NEW MENU ITEMS

1. Select the EDIT ITEMS key.

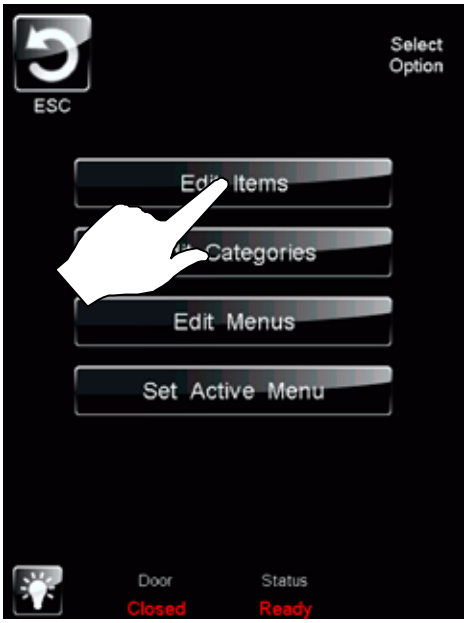


Figure 35

2. Select New?
3. Select the food icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.
4. Name the item. Press the blank shelf below the icon to name the recipe. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.
5. **Program the recipe steps** - Each recipe is made up of steps containing seven settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

   To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

   To add a step, press the + key icon.

   To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

   To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

   Once you are finished, press the DISK icon to save the changes.
6. To file recipe under an existing category, press the EDIT CATEGORIES key. Select the desired category. Press the SELECT ITEMS key. Highlight the new item. Press the ESC key. The disk will be displayed, press to save your changes.

CREATING NEW CATEGORIES

1. Select the EDIT CATEGORIES key.

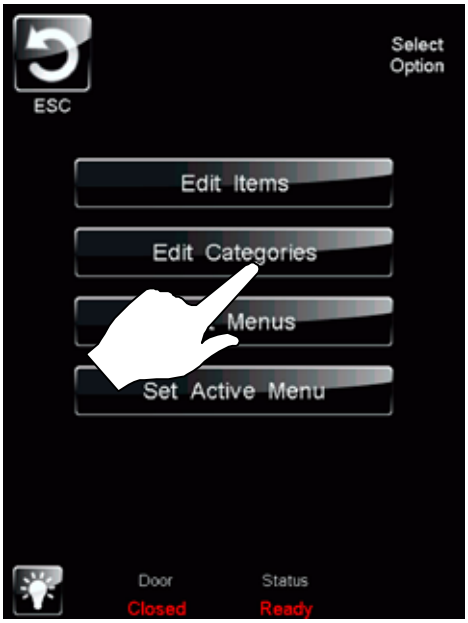


Figure 36

2. Select New?
3. Select the category icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.
4. Press EDIT NAME. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.
5. Press SELECT ITEMS. Select items to be filed in the new category. Items will be highlighted as they are selected. Press ESC key to return to the previous screen. The disk will be displayed, press to save your changes.
6. To display the category, it must be added to the default menu as follows:

   Press the EDIT MENUS key. Select the DEFAULT key. Select the CATEGORIES key. Highlight the new category. Press the ESC key to return to the previous screen. The disk will be displayed, press to save your changes.

SmartTouch Touchscreen Control

TRANSFERRING RECIPES USING THE USB

1. Return to the power screen.

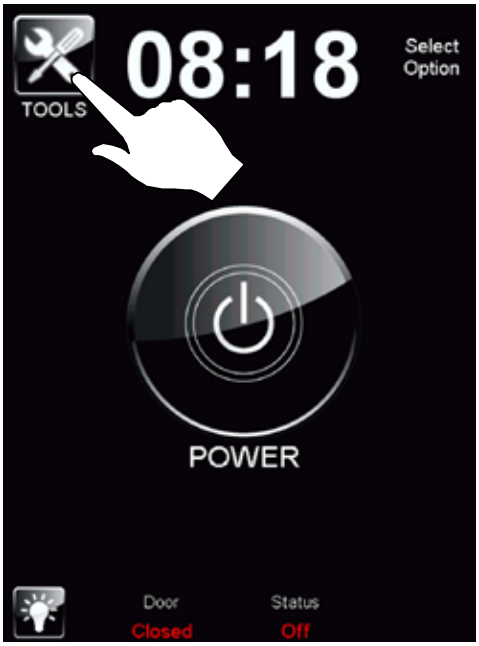


Figure 37

2. Press the TOOLS key. Enter the code 6647 on the keypad.

Figure 38

3. Press the MANAGE MENU DATA key. Insert the USB drive into the Intelliport.

To Store Menu Data to a USB

1. Press the STORE MENU DATA to USB key to transfer recipes to the USB.

Figure 39

2. The keyboard screen is displayed. Use to enter desired file name. Press the ENTER key when finished.

Figure 40

3. The status screen appears to display the download status. The display returns to the previous screen when download is complete.

Figure 41

4. Press the ESC key to exit USB screen.

To Retrieve Menu Data from USB

1. Press the GET MENU DATA from USB key to transfer recipes from the USB.

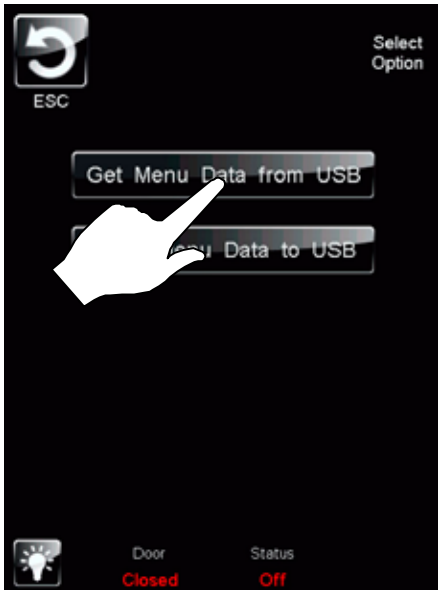


Figure 42

2. The control displays all menu (.MNU) files on the USB drive. Select the desired file.

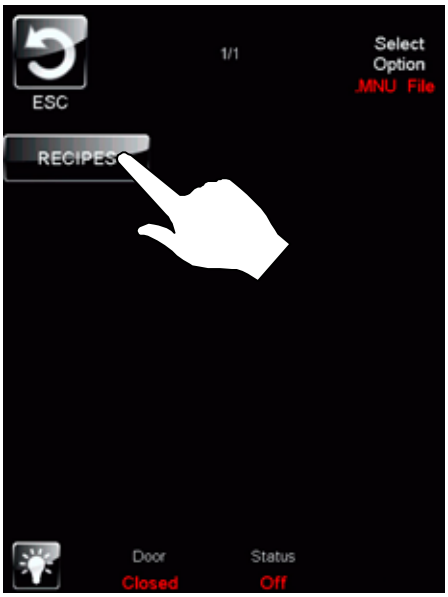


Figure 43

3. The overwrite warning screen appears. Press YES to continue

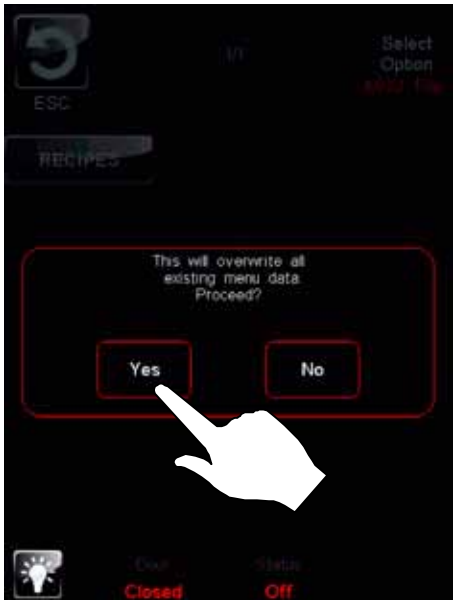


Figure 44

4. The status screen appears to display the upload status. The display returns to the previous screen when upload is complete.

5. Press the ESC key to exit USB screen.

SmartTouch Touchscreen Control

COOL DOWN

1. To cool down the unit, press the COOL DOWN icon.

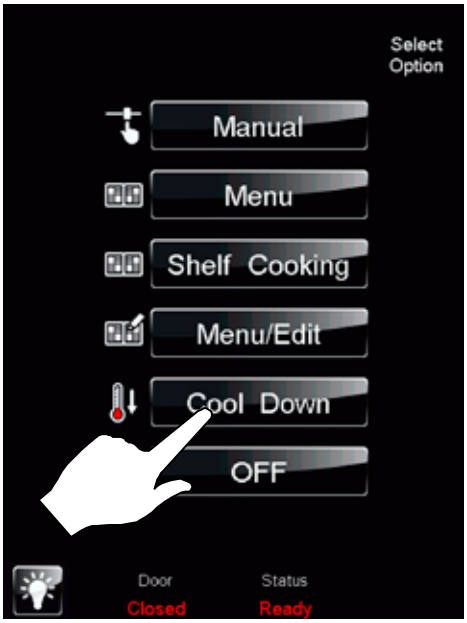


Figure 45

2. The oven will toggle between cooling and open door in yellow until the oven is cool. Once cool, the oven will go to standby.

NOTE: If the oven is shut down with the circuit breaker switch at the bottom of the front panel, the display will return to the power screen. Select your option to begin.

Figure 46

How Cook & Hold Works

With the optional COOK & HOLD feature, meat is roasted at lower temperatures for longer periods of time. This preserves flavor and tenderness and prevents over drying. There are three phases in cook and hold roasting.

- Primary Cooking - controlled by the COOK & HOLD TIMER. The meat is cooked at a low temperature until approximately 2/3 done.
- Cooking from Stored Heat - when the primary cook time expires, the oven automatically switches to HOLD. The product continues to cook from the heat stored in the oven. Meat must remain in the hold cycle for a minimum of 1-1/2 to 2 hours before being served.
- Hold - holds the product for several hours before serving without loss of moisture or tenderness.

All meat should be completely thawed by refrigeration. Using frozen meat increases the cook time causing shrinkage.

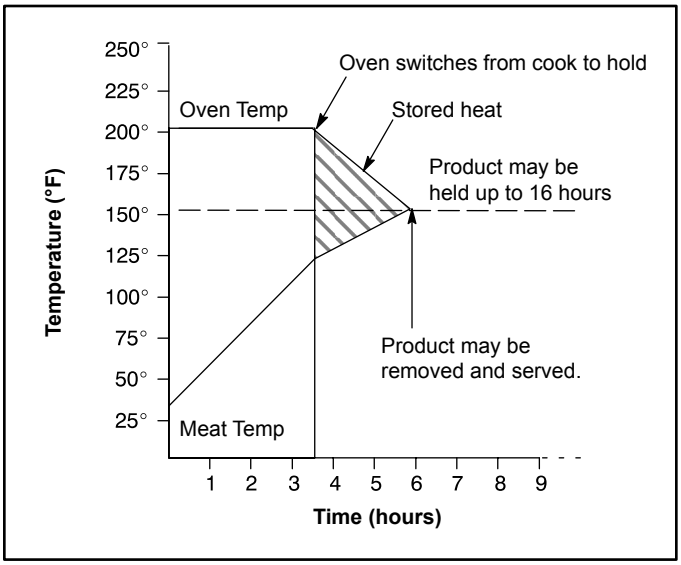


Figure 47

PRODUCT	COOK TEMP.	HOLD TEMP.	QUANTITY	COOK TIME (HRS)	MIN. HOLD TIME (HRS)	TOTAL TIME (HRS)
Prime rib, bone cap off 14-18 lbs. (6.4-8.1 kg)	200°F 93°C	140°F 60°C	1 3 6	3 3-1/4 3-1/2	1 1-1/2 2	4 4-3/4 5-1/2
Prime rib, bone cap on 14-18 lbs. (6.4-8.1 kg)	200°F 93°C	140°F 60°C	1 3 6	3-1/2 4 4-1/2	1 1-1/2 2	4-1/2 5-1/2 6-1/2
Top or bottom rounds 20-22 lbs. (9.1-10.0 kg)	200°F 93°C	140°F 60°C	1 3 6	3-1/2 4 4-1/2	1 1-1/2 2	4-1/2 5-1/2 6-1/2
Pork roast or ham 10-12 lbs. (4.5-5.4 kg)	250°F 121°C	170°F 76°C	2 4 6	4 4-1/4 4-1/2	1 1-1/2 2	5 5-3/4 6-1/2
Turkey 20-22 lbs. (9.1-10.0 kg)	250°F 121°C	170°F 76°C	1 6	3-1/4 4	1 1-1/2	4-3/4 5-1/2
Leg of Lamb, bone in 8-10 lbs. (4.36-4.5 kg)	225°F 107°C	160°F 71°C	2 4 6	2-1/2 2-3/4 3	1 1-1/2 2	3-1/2 4-1/4 5

Operation

General Guidelines for Operating Personnel

COOK TIMES AND TEMPERATURES

Preheating the oven

Always preheat the oven before baking or roasting. We recommend preheating 50°F (28°C) above the cook temperature to offset the drop in temperature when the doors are opened and cold product is loaded into the oven. Set the thermostat to the cook temperature after the product is loaded.

NOTE: For frozen product, preheat the oven 100°F (56°C) above the cook temperature.

Cook Temperatures

Generally, cook temperatures should be 50°F (28°C) lower than deck or range oven recipes. If the edges of the product are done but the center is raw, or if there is color variation, reduce the thermostat setting another 15-25°F (10-15°C). Continue to reduce the cook temperature on successive loads until the desired results are achieved.

NOTE: Cooking at excessive temperatures will not reduce cook time, it will produce unsatisfactory baking and roasting results.

Cook Time

Check the product in about half the time recommended for deck or range oven recipes. Record times and temperatures which provide best results for future reference.

NOTE: Cook time will vary with the amount of product loaded, the type of pan and the temperature.

OPERATING TIPS

Pans and Racks

Product or pan height determines how many racks are used. The oven holds up to ten 18” x 26” (45.7 x 66.0 cm) bun pans.

Load the oven from the bottom, centering the pans on the rack. Never place a pan or aluminum foil on the bottom of the oven. This obstructs the flow of air and results in uneven baking and roasting.

Roasting

To reduce shrinkage when roasting, place meat directly on the racks. Place a sheet pan one-half full of water in the bottom rack position. The water evaporates, increasing humidity in the oven chamber. The pan catches grease from the meat, making oven cleaning easier.

Baking

Weigh the product to ensure equal distribution in each pan. Varying amounts of product will cause uneven baking results.

Fans

The fan must be operating for the oven to heat. Use the Pulse Plus feature to allow light or liquid product to set in the pan and to avoid rippling towards the fan. If your oven is not equipped with this feature use the following procedure.

1. Preheat the oven 25°F (15°C) above the baking temperature.
2. Load the oven with product. Close the doors.
3. Set the thermostat to the baking temperature.
4. Turn the oven off.
5. Allow the product to set for 5-7 minutes with the fan off. The residual heat in the oven sets the product.
6. Turn the oven on for the remainder of the bake.

Lights

Turn the oven lights off when not viewing the product. Leaving the lights on for extended periods of time shortens the bulb life considerably.

Suggested Times and Temperatures

PRODUCT	TEMPERATURE	TIME	# SHELVES
Meats			
Hamburger Patties (5 per lb)	400°F (205°C)	8-10 mins.	10
Steamship Round (80 lb. quartered)	275°F (135°C)	2 hrs 45 mins.	2
Standing Rib Choice (20 lbs, trimmed, rare)	235°F (115°C)	2 hrs 45 mins.	2
Banquet Shell Steaks (10 oz. meat)	450°F (235°C)	7-8 mins.	5
Swiss Steak after Braising	275°F (135°C)	1 hr.	5
Baked Stuffed Pork Chop	375°F (190°C)	25-30 mins.	5
Boned Veal Roast (15 lbs.)	300°F (150°C)	3 hrs. 10 mins.	2
Lamb Chops (small loin)	400°F (205°C)	7-8 mins.	5
Bacon (on racks in 18” x 26” pans)	400°F (205°C)	5-7 mins.	10
Poultry			
Chicken Breast & Thigh	350°F (175°C)	40 mins.	5
Chicken Back & Wing	350°F (175°C)	35 mins.	5
Chicken (21/2 lbs. quartered)	350°F (175°C)	30 mins.	5
Turkey Rolled (18 lb. rolls)	310°F (155°C)	3 hrs 45 mins.	3
Fish and Seafood			
Halibut Steaks, Cod Fish (frozen 5 oz)	350°F (175°C)	20 mins.	5
Baked Stuffed Lobster (21/2 lb.)	400°F (205°C)	10 mins.	3
Lobster Tails (frozen)	425°F (220°C)	9 mins.	5
Cheese			
Macaroni & Cheese Casserole	350°F (175°C)	30 mins.	5
Melted Cheese Sandwiches	400°F (205°C)	8 mins.	10
Potatoes			
Idaho Potatoes (120 ct.)	400°F (205°C)	50 mins.	5
Oven Roasted Potatoes (sliced or diced)	325°F (165°C)	10 mins.	5
Baked Goods			
Frozen Berry Pies (22 oz)	325°F (150°C)	35 mins.	5 (30 pies)
Fresh Apple Pie (20 oz.)	350°F (175°C)	25-30 mins.	5 (30 pies)
Pumpkin Pies (32 oz.)	300°F (150°C)	30-50 mins.	5 (20 pies)
Fruit Crisp	300°F (150°C)	25 mins.	5
Bread (24 - 1 lb. loaves)	325°F (155°C)	30 mins.	3
Southern Corn Bread	375°F (190°C)	15-20 mins.	5
Baking Soda Biscuits	400°F (205°C)	6 mins.	5
Brown & Serve Rolls	350°F (175°C)	15 mins.	5
Sheet Cakes (5 lb. mixed batter per pan)	325°F (160°C)	16-18 mins.	5
Chocolate Cake	325°F (160°C)	20 mins.	5
Brownies	325°F (150°C)	15 mins.	5

NOTE: Actual times and temperatures may vary considerably from those shown above. They are affected by weight of load, temperature of the product, recipe, type of pan and calibration of thermostat. Should your recipe vary, write in your proven time and temperature for ready reference.

Maintenance

Cleaning and Preventative Maintenance

DAILY CLEANING

Oven Cool Down:

1. Turn the oven to COOL DOWN.

   NOTE: The doors may be opened to speed the cooling process.

Cleaning the exterior

1. Saturate a cloth with a mild soap and water mixture. Wipe the oven when it is cold.
2. Dry the oven with a clean cloth.
3. Heat tint and heavy discoloration may be removed with any non-toxic, non-caustic, commercial oven cleaner and stainless steel polish.

Cleaning the interior

Deposits of baked on splatter may be removed with any non-toxic, non-caustic, food safe, commercial oven cleaner.

1. Apply cleaner following the manufacturer's direction. Always rub with the grain of the metal.

WEEKLY CLEANING

1. Remove any loose debris or particle buildup from the racks, rack supports, baffle, blower wheel and temperature probe.

MONTHLY CLEANING

Clean racks, rack supports, baffle and blower wheel

1. Remove the racks, rack supports and baffle.
2. Hold the blower wheel with a gloved hand.
3. Use an L-shaped brush to clean the fins on the blower wheel.
4. Use a hand brush to clean the center portion of the blower wheel.
5. Wipe around the fan with a damp towel.
6. Soak racks, supports and baffle in a solution of non-toxic, non-caustic, food safe, commercial oven cleaner. Allow to soak overnight if necessary.
7. Reinstall parts.

Clean temperature probe

1. Use a damp towel to wipe the probe. Handle with care.

Clean cooling fan

1. Brush off the cooling fan located on the back of the oven behind the control compartment.

PREVENTATIVE MAINTENANCE

Annual Maintenance

The following checks should be part of an annual scheduled maintenance. This maintenance must be performed by an authorized service agency. Contact your local Blodgett service company, a factory representative or the Blodgett Oven company.

1. Check venting system.
2. Check temperature calibration.
3. Adjust and grease door switch for proper closure.
4. Clean any debris out of control tray. Check for loose connections. Replace any discolored connections.
5. Retorque all electrical connections between the element and contactors.

⚠ WARNING!!

Always disconnect the appliance from the power supply before servicing or cleaning.

Troubleshooting Guide

POSSIBLE CAUSE(S)	SUGGESTED REMEDY
SYMPTOM: Heating elements do not come on.	
• Oven not plugged in. • Power switch on the control panel is off. • Control set below ambient temperature. • Doors are open. • Computerized controls - error code on display.	• Plug in electrical supply cord. • Set the control panel to COOK or OVEN ON. • Set to desired cook temperature. • Close doors. • *
SYMPTOM: Oven does not come to ready.	
• The oven has not reached preheat temperature. • Fan delay feature may be activated, if applicable. • Internal problem with main temperature control.	• Wait for oven to reach preheat temperature. • Deactivate fan delay feature. • *
SYMPTOM: Convection fan does not run.	
• Oven is not plugged in. • Oven is not set to the cook mode. • Circuit breaker tripped. • Fan delay feature may be activated, if applicable. • Doors are open	• Plug in electrical supply cord. • Set the control panel to COOK or OVEN ON. • Reset the breaker. • Deactivate fan delay feature. • Close doors.
SYMPTOM: General baking problems.	
• Computerized controls - incorrect product programming. • Thermostat out of calibration.	• Reprogram control per Operation section. • *
**Denotes remedy is a difficult operation and should be performed by qualified personnel only. It is recommended, however, that All repairs and/or adjustments be done by your local Blodgett service agency and not by the owner/operator. Blodgett cannot assume responsibility for damage as a result of servicing done by unqualified personnel.*	

WARNING!!

Always disconnect the power supply before cleaning or servicing the oven.